DOCUMENT RESUME

ED 066 438 24 SP 005 847

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TITLE	Stability in Teacher Effectiveness.
INSTITUTION	Texas Univ., Austin. Research and Development Center for Teacher Education.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/OE), Washington, D.C.
REPORT NO	RD-77
BUREAU NO	BR-5-0249
PUB DATE	Jul 72
NOTE	52p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Achievement Gains; Educational Research; *Effective Teaching; Grade 2; Grade 3; *Student Development; *Student Improvement; Teacher Behavior; *Teacher Influence
IDENTIFIERS	Metropolitan Achievement Test

ABSTRACT

This paper presents statistical information on the degree of consistency shown by second- and third-grade teachers in producing student gains in the Metropolitan Achievement Test (MAT) scores. Data are presented separately for each grade and for 15 Title 1 versus 35 non-Title 1 schools. Included are correlations within each school year showing teacher consistency in mean residual gains produced across three successive school years. Although gain scores were computed with a simple linear model and several key factors could not be controlled, the stability coefficients obtained compare favorably with those previously reported and suggest that teacher consistency may be higher than previously suspected, at least among experienced teachers working in their usual fashion with their normal classes. Studies of such teachers who are stable over time in their relative effectiveness are needed to discover the teacher behaviors that are related to success in producing student achievement gains. (Author)

ED 066438

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R&D REPORT SERIES 77

BR 5-0244
SP

SP 005 847

STABILITY IN TEACHER EFFECTIVENESS

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The Research and Development Center for Teacher Education
The University of Texas at Austin

July, 1972

E R R A T A

Report Series No. 77

Stability in Teacher Effectiveness

Jere E. Brophy

On the first pages of both Appendix A and Appendix B, the phrase

...influence of entry level (preschool)...

should read

...influence of entry level (prescores)...

STABILITY IN TEACHER EFFECTIVENESS 1

Abstract: This paper presents statistical information on the degree of consistency shown by second- and third-grade teachers in producing student gains on the Metropolitan Achievement Tests. Data are presented separately for each grade and for Title 1 vs. non-Title 1 schools. Included are correlations within each school year showing teacher consistency in producing gains across the two sexes and across several subtests of the Metropolitan Achievement Tests, and stability coefficients showing teacher consistency in mean residual gains produced across three successive school years.

Although gain scores were computed with a simple linear model and several key factors could not be controlled, the stability coefficients obtained compare favorably with those previously reported and suggest that teacher consistency may be higher than previously suspected, at least among experienced teachers working in their usual fashion with their normal classes. Studies of such teachers who are stable over time in their relative effectiveness are needed to discover the teacher behaviors that are related to success in producing student achievement gains.

*The author wishes to acknowledge and thank Thomas Good and Donald Veldman for their suggestions regarding the overall conceptualization of the research; Edmund Emmer, Earl Jennings, and Donald Veldman for their statistical design suggestions; Edmund Emmer, Thomas Good, and Barak Rosenshine for their comments on an earlier version of the paper; Carolyn Evertson, Kathey Paredes, Kathy Senior, and Jon Sheffield for their help in data preparation and analysis; and Susan Florence and Karen Mays for their help in manuscript preparation.

This paper is an expanded version of a paper entitled "Stability in Teacher Effectiveness" delivered by the author at the annual meeting of the American Educational Research Association, 1972.

Research on teacher effectiveness has had remarkably little success, given the effort expended, in identifying the characteristics of effective teachers or in specifying teacher behaviors associated with success in producing student achievement gains. Morsh and Wilder (1954) reviewed the literature through 1952 and concluded that no specific teacher behavior was invariably and significantly correlated with student achievement gains. Later reviews (Gage, 1963; Jackson and Getzels, 1963) reached similar conclusions.

More recent reviews (Flanders and Simon, 1969; Rosenshine and Furst, 1971) are noting methodological advances and some consistency in findings relating teacher behavior to stu-

dent achievement. Even the teaching variables they cite, however, do not show strong relationships with measures of student achievement gains. Their optimism is based upon agreement across several studies showing significant but weak relationships, rather than strong and clear-cut relationships. Thus, the search for effective teachers and the attempt to identify effective teaching behavior have not produced much. Those positive findings which have appeared are relatively weak ones.

Partly for this reason many observers now hold that teaching is an extremely complex art and that what is effective teaching will vary with the student and the situation, so that any search for generally effective teachers or effective teaching behavior is doomed to failure from the start. This view is especially common among those who reject student achievement gain as an important measure of teacher effectiveness, although many who do stress this criterion also hold this view because of researchers' continued failure to demonstrate clear relationships between teaching behavior measures and student gain measures.

This research assumes that student achievement gain is an important criterion of teaching effectiveness.

It is not seen as the only criterion, or even necessarily as the prepotent one, but it is assumed to be an important criterion for judging teacher effectiveness. Furthermore, it is especially useful for research purposes because, in contrast to criteria such as promoting social development and improving motivation and self concept, it is more easily and reliably measured.

Consequently, student achievement gain was selected as the criterion for teacher effectiveness for this research. When the terms "teacher effectiveness" or "effective teaching" are used, they refer solely to effectiveness in producing gains in measured achievement.

As previously noted, even studies which have used student achievement gain as the criterion of teacher effectiveness have not produced clear results. One reason is that few studies have included both measures of teacher behavior and measures of subsequent student gain in the same research. Instead, many have used high-inference ratings or other non-behavioral teaching measures, or have used something other than measured student gain as the effectiveness criterion. Mitzel and Gross (1958) reviewed several studies that separated teachers on their relative effectiveness in producing student gain and then sought to identify teaching behavior which was associated with success in producing gains. They concluded that effective and ineffective teachers could not be identified unequivocally and that no particular teaching behavior was consistently related to effectiveness.

Part of the reason for this was that many studies used student teachers, first-year teachers, or teachers involved in a special experimental study. Furthermore, such studies were usually confined to one school year at the most. When teachers are inexperienced or when they are involved in a new and special experimental program, their classroom behavior is likely to be unstable. Furthermore, without replication or repeated measurements of effectiveness across several sam-

plings, it cannot be known whether such teachers will be stable in their relative effectiveness in producing student gains.

The serious nature of this problem was noted in a recent review by Rosenshine (1970), who could locate only five long-term studies which included stability coefficients reflecting consistency across time on measures of teacher effectiveness. These five studies are very different from and difficult to compare with one another; but, with one exception, the stability coefficients in these studies were generally low, often near zero.

As far as they go, the available data may seem to support the skeptical view that teaching effectiveness is a complex, elusive art ill-suited for scientific study. However, the available data are really not appropriate as a basis for drawing such conclusions about typical teachers, since these data come mostly from atypical teaching situations.

How stable is the effectiveness of typical teachers? Are some teachers more stable than others? The present study was an attempt to answer such questions with more appropriate data than have been used in the past. In particular, the problem of stability in teacher effectiveness was addressed by studying ordinary teachers who were working with their regular classes in their usual fashion (no experimental intervention was involved), and by extending the scope of the research over a time period long enough to allow us to reasonably judge stability (three full school years).

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METHOD

The raw data for this study, obtained with the cooperation of a city school system, consisted of individual students' scores on the Metropolitan Achievement Tests which are administered each fall. Although records for all grades were available, resource limitations required a selection of only a part of the data. On the assumption that student achievement gain is generally more acceptable as an important criterion of teacher effectiveness at the earlier grades, the study was focused on the early elementary grades rather than the intermediate or secondary grades. The first grade was dropped from consideration, however, because satisfactory pre-scores were not available at this grade. The children do take the Metropolitan Readiness Tests, but these are known to be heavily influenced by differences in home environments, and they do not have a direct continuity with the later Metropolitan Achievement Tests. For these and other reasons, it seemed prudent to avoid the first grade rather than use readiness scores as pre-scores.

Therefore, the second and third grades were selected for study. The Metropolitan Achievement Test scores from the fall of the second grade were used as pre-scores for the second grade, and the scores from the tests given in the fall of the third grade were used as post-scores. Similarly, the tests given in the fall of the third grade were used as pre-scores for the third grade and the tests given in the fall of the fourth grade were used as post-scores. These data were compiled for the school years beginning in 1967, 1968, and 1969.

TO REPLACE PAGE 4 AND PAGE 5 (UP TO THE "RESULTS SECTION") OF REPORT NO. 77, "STABILITY IN TEACHER EFFECTIVENESS," RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION, THE UNIVERSITY OF TEXAS AT AUSTIN.

The study included all teachers in these two grades who were teaching at the same grade level for all three years. All available data for children in their classes during these three years were recorded. Grade level equivalents rather than raw scores were used, since these are cruder and more normalized measures likely to contain less error variance than the raw scores. Data were available from 15 Title I schools and 35 non-Title I schools. These were two separate sets of data, since different tests were used in the two types of schools.

The Title I schools used the Primary I battery of the Metropolitan Achievement Tests (copyright 1958) in grade 2, the Primary II battery (copyright 1958) in grade 3, and the elementary battery (copyright 1959) in grade 4. This posed no problem for the word knowledge, word discrimination, and reading subtests, since these appear in all three batteries. However, the Primary I battery contains only a single arithmetic subtest (arithmetic concepts and skills), while the Primary II and the elementary batteries contain two (arithmetic computation and arithmetic concepts and problem solving). The school records, however, contained only information on the composite total arithmetic score for the Primary II battery.

Thus the second grade teachers in Title I schools have only one set of data for arithmetic, based upon the arithmetic concepts and skills subtest of the Primary I battery (pretest) and the composite total of the Primary II battery (posttest). In this case the pretest was primarily arithmetic computation, while the posttest composite combined computation and reasoning.

Third grade teachers in Title I schools have two sets of gain data for arithmetic, but both sets of post-scores were adjusted using the same set of prescores as covariates. Since only the composite total arithmetic score was available from the Primary II battery as an arithmetic pretest, it was

used as a covariate in computing residual gain scores for both the arithmetic computation subtest and the arithmetic concepts and problem solving subtest of the elementary battery given in fourth grade. A similar procedure was used for the grade 2 teachers in non-Title I schools, since the Primary II battery was used in grade 2 and the elementary battery in grade 3. In these cases, a composite total score was used as a prescore covariate for two more specific postscores. Although these covariate controls were less satisfactory than controls using the same subtest would have been, they were used nevertheless, because a partially satisfactory covariate was preferable to the use of raw gain scores.

Computation of residual gains for non-Title I grade 3 classes was simpler, since the elementary battery used in grades 3 and 4 contains the same five subtests (word knowledge, word discrimination, reading, arithmetic computation, and arithmetic concepts and problem solving). Thus both pre- and postscores were available on the same subtests for these teachers' classes.

Residual gain scores were first computed for each student within sex, since girls generally outperform boys at these ages, and within each of the three years to guard against any systematic yearly difference. Thus, for example, the five residual gain scores for a second grade boy in a non-Title I school in 1969 were based on the five respective distributions of pre- and postscores for all boys in second grade in 1969 in the classes of teachers in non-Title I schools who were included in the sample. Using the five respective prescores as covariates, residual gain scores on each of these give subtests were computed for each student, using a linear model where $g = y - (a + bx)$.

Data for teachers were then compiled by computing mean residual gain scores for each of their three respective classes. Within each subtest, a mean was computed for each sex and for the class as a whole, for each teacher for each of the three years under study. These analyses resulted in four sets of data: gain scores for second (N = 34) and third grade (N = 26) teachers in

Title I schools, and gain scores for second (N = 54) and third grade (N = 51) teachers in non-Title I schools. Correlational analyses of these four data sets (mean residual gains) were then used to investigate consistency across subtests within year and stability across the two sexes and the three years within subtest.

RESULTS

CONSISTENCY ACROSS SUBTESTS

Correlations among the mean residual gain scores within each of the three years are shown in Table 1. Some teachers were excluded from these analyses because of seriously incomplete data. These were teachers working in schools having a high rate of

TABLE 1. CORRELATIONS OF MEAN ADJUSTED GAIN SCORES ON THE SUBTESTS OF THE METROPOLITAN ACHIEVEMENT TEST WITHIN YEARS

Grade 2, Title 1 Schools (Possible N = 34)[1]

	1967-1968 (N = 30)			1968-1969 (N = 27)			1969-1970 (N = 27)		
	WD	R	A	WD	R	A	WD	R	A
WK	.71***	.90***	.73***	.64***	.80***	.58**	.69***	.55**	.33*
WD		.71***	.56***		.55**	.60***		.67***	.15
R			.67***			.42*			.33*

Grade 2, non-Title 1 Schools (Possible N = 54)[1]

	1967-1968 (N = 49)				1968-1969 (N = 43)				1969-1970 (N = 36)			
	WD	R	AC	AR	WD	R	AC	AR	WD	R	AC	AR
WK	.58***	.62***	.26*	.41**	.74***	.68***	.28*	.39**	.67***	.57***	.41**	.51**
WD		.55***	.03	.31*		.72***	.11	.31*		.71***	.46**	.52**
R			.17	.30*			.31*	.51***			.47**	.51**
AC				.68***				.64***				.80***

Grade 3, Title 1 Schools (Possible N = 26)[1]

	1967-1968 (N = 26)				1968-1969 (N = 24)				1969-1970 (N = 22)			
	WD	R	AC	AR	WD	R	AC	AR	WD	R	AC	AR
WK	.88***	.92***	.03	.57**	.62**	.89***	.52**	.59**	.55**	.69**	.30	.31
WD		.87***	.24	.73***		.61**	.29	.37*		.53**	.35	.41
R			.13	.67***			.58**	.66***			.50**	.57**
AC				.53**				.72***				.83***

TABLE 1. (Continued)

Grade 3, non-Title 1 Schools (Possible N = 51)[1]

	1967-1968 (N = 46)				1968-1969 (N = 42)				1969-1970 (N = [illegible])			
	WD	R	AC	AR	WD	R	AC	AR	WD	R	AC	AR
WK	.70***	.65***	.65***	.70***	.62***	.43**	.48**	.40**	.63***	.45**	.36**	.56*
WD		.54***	.60***	.67***		.38**	.41**	.26*		.37**	.44**	.45*
R			.63***	.63***			.30*	.39**			.26*	.28*
AC				.71***				.71***				.70*

[1]Classes for a given year were excluded if data were not available for at least 14 student

* - $p < .05$

** - $p < .01$

*** - $p < .001$

pupil turnover so that only a minority of students present for testing one year were back again the following year. Since the remaining students in such classes are likely to be a nonrandom sample, a cutoff point of 14 was established (arbitrarily). When data on fewer than 14 students from a given class were available, the class was excluded from the analyses.

Inspection of Table 1 shows that most correlations across subtests were moderate to high (.40 - .80). As would be expected, most of the low correlations that do appear are between language arts subtests and arithmetic subtests. Thus teachers are more consistent in producing gains within these two general curriculum areas than across them; success in producing language arts gains does not always imply success in producing arithmetic gains.

Within the subset of three language arts subtests the reading test was more pivotal, usually correlating higher with word knowledge and word discrimination than the latter tests correlated with each other. Also, as might have been expected, the language arts test regularly correlated higher with arithmetic concepts and problem solving (which involved *reading* arithmetic problems) than with arithmetic computation, a more purely mathematical test.

CONSISTENCY ACROSS SEX OF STUDENT

Correlations of the teachers' mean residual gains for boys with their mean residual gains for girls were computed within each subtest for each year, using an arbitrary cutoff of seven or more students in each sex group as the basis for including a given class in the analyses. These correlations were all very high, approaching 1.00. Thus individual (female) teachers do not tend to be differentially effective with boys vs. girls, although, as previously noted, girls generally outperform boys in American schools at these grades.

This conclusion was confirmed by an informal analysis of each teacher's mean residual gains for boys and for girls, within each subtest and year. Of 68 teachers with a full data set, only four showed sizable and consistent sex differences in residual gain means. Two of these did better with boys and two with girls (see Appendix A.). These data are consistent with data from several sources showing that, despite frequent claims to the contrary, female teachers are not typically biased towards girls and against boys (Brophy and Good, 1973).

Correlations across the three years for mean residual gains with each of the subtests are presented in Table 2. Again, an arbitrary cutoff of 14 students was used in excluding certain classes from the analyses.

Although there are a few exceptions, correlations between contiguous years tend to be .25 or higher. They generally compare favorably with the figures obtained in the five long-term studies reviewed by Rosenshine (1970), at least for three of the four samples.

The reasons why the stability coefficients for the second-grade teachers in Title 1 schools are lower than those for the other three groups are not known, although they may be due to a combination of the age and degree of cognitive development of the children. That is, children from economically disadvantaged families develop in an environment that is less conducive to the stimulation of full development of

TABLE 2. STABILITY COEFFICIENTS ACROSS THREE YEARS FOR MEAN ADJUSTED GAIN SCORES ON THE SUBTESTS OF THE METROPOLITAN ACHIEVEMENT TESTS

GRADE 2

Title 1 Schools (Possible N = 34)[1]				Non-Title 1 Schools (Possible N = 54)[1]		
Years 1-2 (N = 26)	Years 2-3 (N = 22)	Years 1-3 (N = 24)		Years 1-2 (N = 42)	Years 2-3 (N = 36)	Years 1-3 (N = 37)
WK .49**	.18	.10	WK	.41**	.42**	.45**
WD .26	.28	.30	WD	.63***	.42**	.50**
R .31	.00	-.05	R	.40**	.42**	.43**
A .24	-.12	-.03	AC	.34*	.45**	.06
			AR	.35*	.33*	.42**

GRADE 3

Title 1 Schools (Possible N = 26)[1]				Non-Title 1 Schools (Possible N = 51)[1]		
Years 1-2 (N = 24)	Years 2-3 (N = 20)	Years 1-3 (N = 22)		Years 1-2 (N = 44)	Years 2-3 (N = 42)	Years 1-3 (N = 41)
WK .52**	.78***	.65***	WK	.39**	.45**	.40**
WD .28	.19	.02	WD	.30*	.26*	.26*
R .54**	.39*	.08	R	.26*	-.07	.10
AC .39*	.51*	.55**	AC	.61***	.65***	.44**
AR .28	.32	-.19	AR	.41**	.46**	.32*

[1]Classes for a given year were excluded if data were not available for at least 14 students.

* - $p < .05$

** - $p < .01$

*** - $p < .001$

their cognitive potential than children from more advantaged families (Hess, 1970). Thus their learning potential is more variable when they enter school, and it may take an extra year before they begin to perform consistently, establishing a relatively stable level of achievement with respect to their classmates.

This is merely one possibility, however; other explanations, such as sampling error or some unknown difference between second-grade teachers in Title 1 schools and teachers in the other three groups, are also possible.

The generally higher coefficients in Table 1 as compared to Table 2 show that a yearly "student cohort" or "class" effect exists, despite the controls involved in using residual rather than raw gains and despite the decision to compute gains within each of the three years separately. While it is *possible* that the explanation for this resides primarily with the teacher (a given teacher vacillates in effectiveness across years, other things being equal), it seems much more *probable* that class variables such as general motivation and classroom atmosphere exert some effect on the achievement of the class as a whole in a given year. Also, factors such as illness and personal problems in both teachers and students are more likely to exert constant effects on achievement within a single year than across two or more years.

IDENTIFYING CONSISTENT TEACHERS

The data presented above represent the first step in a planned series of investigations on teaching effectiveness. The correlational analyses are group data. While they are useful for showing that considerable stability is evident in the general sample, they mask individual differences among teachers. The next step in the research involved selection of consistent teachers for further study.

Although they can be operationally defined, terms like "stable" and "consistent" are relative, subjectively defined terms. One observer, using loose criteria, might label a particular teacher as consistent, while another, using tighter criteria, might see the same teacher as inconsistent. This section presents the author's impressions of the degree of consistency in the samples, based on his own subjective criteria. Appendices A and B are provided for those readers who wish to approach the data with their own criteria.

There are at least three kinds of consistency that can be explored in the data of Appendix B. The first, represented by the standard deviations, involves the variability in gains within each class. Small standard deviations mean that the teacher tends to produce equivalent gains in all her students, while larger ones suggest relatively large gains by some students and small ones by others. This aspect of consistency, though interesting, was not used as a criterion for selecting teachers for two reasons.

First, the criterion appears to be overly restrictive. If a class were homogeneously grouped, deliberately or randomly, variability would be reduced. The school system did not practice homogeneous grouping officially, but it probably occurred unofficially at some schools. Also, even with statistical control via the residualizing process, individual differences among

students are bound to have some effect. "Late bloomers" and children whose prescores were artificially depressed (due to illness, emotional problems, or other factors which hampered learning the previous year) will show greater than expected gains, on the average, in their residual scores. Similarly, students with prolonged illness or emotional problems in a given year will gain less than expected, despite the teacher's efforts. Since individual differences of this sort were not controlled, the standard deviations are less useful as criteria of consistency in teachers.

The second reason is practical: probably for the reasons just described the standard deviations show great variability. A few teachers regularly show very high standard deviations, but there is no corresponding group showing consistently low standard deviations. Thus there is no subgroup of teachers who are consistent by this criterion.

The other two criteria of consistency are based on the teachers' mean residual gain scores for each of the three years. The first criterion is *linear constancy* across the three means for a given subtest. When this appears, the teacher shows approximately the same mean residual gain for each of the three years (for example, .27, .31, and .29). This is the most widely accepted, common sense criterion of teacher consistency.

A somewhat different kind of consistency is seen in the data for teachers who show a *linear trend* across the three years. Such teachers show a pattern of either improvement (.03, .24, .42) or decline (.38, .16, -.08) in effectiveness. While this is not stability in the sense of linear constancy, it does represent a form of consistency.

The author's judgments concerning consistency are indicated in the symbols included in Appendix B. Whenever data for a given subtest were available for all three years, one of four consistency symbols was assigned:

1. A horizontal line (—) indicates linear constancy;
2. A rising line (/) indicates linear improvement;
3. A falling line (\) indicates linear decline;
4. An angular line (∧) indicates a non-linear trend.

Overall, 28% of these symbols indicate linear constancy; 13%, linear improvement; 11%, linear decline; and 49%, non-linearity. Thus about half of the assigned symbols indicate some form of general consistency.

The 49% showing non-linearity are not necessarily inconsistent, however. Certain teachers show a sharp change after the first year (.03, .38, .40) or after the second year (.05, .02, .36). While many fluctuations are merely error variance, some of the changes that appear to be non-linear or random in the data from three years would form a systematic pattern if later data were available. For example, compare the three-year pattern shown above (.03, .38, .40) with a hypothetical five-year pattern for the same teacher (.03, .38, .40, .44, .42). The latter shows the teacher attaining a linearly constant, high level of effectiveness after some initial mediocrity.

Given the probable masking of some consistency by the limitations of the data, and given the many uncontrolled factors operating to affect a teacher's effectiveness with her class during a given year, it seems likely that the present data, to the extent that they may be in error, are *underestimating* the consistency of teacher effectiveness.

In addition to the probable sources of error already mentioned, it should be noted that the residual gain scores used were computed with simple linear regression models which tend to underestimate the expected gain for high achievers and overestimate it for low achievers. As a result, a teacher with a low ability group is penalized and a teacher with a high ability group is over-credited when mean residual gains are computed. Although the school district did not officially practice ability grouping, it is likely that certain schools did so unofficially, and student aptitude was not directly measured or controlled in this research. This would produce instability in mean gain scores whenever a teacher who had a high group one year had an average or low group the next, or vice versa.

The findings indicate that, at least in grades two and three, teachers who are consistent in their relative effectiveness can be identified. As noted, the vast majority of these consistent teachers are about equally successful with boys as with girls. Some are also about equally successful across three years in producing gains on the four or five Metropolitan subtests on which data are available. Others show a more complex kind of consistency, such as producing high gains in language arts and low gains in math, or vice versa. Observational studies of these consistent teachers, done in the naturalistic setting as they carry out their normal activities with their own students, should yield greater payoff than the kinds of teacher effectiveness research done in the past.

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This paper was prepared with partial support of U.S. Office of Education Contract, OE 6-10-108, The Research and Development Center for Teacher Education, The University of Texas at Austin. The opinions expressed herein do not necessarily reflect the position or policy of the Office of Education and no official endorsement by the Office of Education should be inferred.

APPENDIX A

MEAN ADJUSTED GAIN SCORES FOR BOYS AND FOR GIRLS ON THE SUBTESTS OF THE METROPOLITAN ACHIEVEMENT TESTS ACROSS THREE YEARS

Means are shown only for those classes in which scores for seven or more boys or girls were available; blank cells indicate that data were available on fewer than seven children.

All scores derive from covariance analyses computed within Title 1 versus non-Title 1 schools, within boys versus girls, and within year one versus year two versus year three, for each subtest separately.

Adjusted gain scores have Mean = 0 and SD = 1, and reflect gain (in grade level equivalent scores) when the influence of entry level (preschool) is statistically controlled. Positive values reflect a higher mean gain than would be expected by chance and negative values a lower one.

Abbreviation Key

B - Boys, G - Girls
WK - Word Knowledge (vocabulary)
WD - Word Discrimination
R - Reading
*A - Arithmetic Concepts and Skills
*AC - Arithmetic Computation
*AR - Arithmetic Concepts and Problem Solving (arithmetic reasoning)

*See text of paper regarding these three subtests.

GRADE 2—TITLE I		WK			WD			R			A		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.54	-.35	.08	-.40	-.11	-.00	-.71	-.28	-.07	-.10	-.11	-.12
1	G	-.23	-.06	.06	.12	.24	.09	-.40	-.00	.17	.17	-.19	.04
	B	.08		-.11	.26		-.02	.36		.00	.13		.11
2	G	-.01	-.07		-.12	.01		-.01	-.29		.02	-.31	
	B	-.03	.09	-.01	-.08	.28	-.26	-.15	.03	-.09	-.48	.06	.03
3	G			-.15			-.07			-.40			.10
	B	.66	.02		.34	-.03		.45	.17		.32	-.21	
4	G		.14	.25		-.20	.32		.19	-.08		-.05	-.19
	B	-.30	.10	.10	.10	-.02	.58	-.22	.06	.30	-.16	.18	.13
5	G	-.11	.25	.09	.17	.34	.35	-.24	.40	-.22	.04	.30	-.13
	B	.03	.29	-.15	.12	.31	-.30	-.31	.41	-.19	.06	.22	-.27
6	G		.52	-.17		.79	-.08		.86	-.13		.26	-.41
	B	-.29	-.27		-.21	-.07		-.35	-.23		-.26	-.07	
7	G	-.22	-.06	-.17	-.14	-.43	-.30	-.13	-.02	-.65	-.13	.01	-.43
	B			-.11			-.11			-.26			.23
8	G	-.33	.06		-.07	.02		-.56	-.21		-.08	.24	
	B		-.27	-.03		-.10	-.11		-.28	.31		-.05	-.05
9	G	-.45	-.27	-.26	-.57	-.33	-.15	-.76	-.19	-.17	-.29	-.29	-.22
	B												
10	G		.11			.08			.23			.03	
	B	-.15	-.24		.11	-.41		-.07	-.29		-.16	-.24	
11	G	.07	-.14		-.06	-.13		.33	-.29		.07	-.12	
	B	1.12	.29	-.12	.35	.18	-.16	.90	.12	-.07	.75	.11	-.14
12	G	.83		-.05	.25		-.06	1.16		.00	.87		-.21

		WK			WD			R			A		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.05	-.18	-.51	-.07	-.40	-.43	-.13	-.32	-.17	-.05	-.14	-.34
13	G	.05	-.18	-.29	-.36	-.42	-.26	-.19	-.56	-.16	-.06	-.34	.04
	B	-.04	.02		-.14	-.05		-.06	.03		-.08	-.47	
14	G	.19	-.35		-.11	-.38		-.03	.08		-.19	-.18	
	B	.03	.13	.45	-.07	.00	.51	-.06	.02	.15	-.09	-.10	-.08
15	G	-.08	-.20		-.23	-.33		-.13	-.14		-.08	-.04	
	B	-.35	-.27	-.13	-.17	-.17	-.06	-.29	-.09	-.09	-.12	.05	-.06
16	G	-.53	-.47	-.26	-.17	-.13	-.04	-.48	-.41	-.10	-.29	.08	-.07
	B	-.33	-.09	.33	.02	.29	.28	-.24	-.10	.24	.00	.02	.12
17	G	-.18	-.02	.54	.14	.07	.19	-.61	.47	.40	-.28	-.19	.13
	B	-.38		-.15	-.43		-.18	-.70		-.23	-.29		-.04
18	G	-.38	.09	-.15	-.35	.30	-.22	-.17	-.01	.11	-.20	-.20	.14
	B	-.03		.09	.27		.32	.10		.17	.02		.32
19	G	.09	.10	.02	.05	.40	-.02	.41	.19	.56	.13	.15	.28
	B	-.15	.09		-.52	.17		-.15	.16		-.02	-.06	
20	G	.14			-.27			-.05			-.06		
	B		.20	-.04		.32	-.03		.05	-.16		.50	-.18
21	G	-.33	.22	-.06	-.15	.35	.19	-.07	.00	.36	.01	.33	-.37
	B	-.34	-.16		-.24	-.04		-.16	-.35		.01	.07	
22	G	.01	-.38	.10	.18	-.39	-.24	.01	-.42	.04	-.19	-.04	.34
	B	.05	-.09	-.01	.23	.01	-.25	.23	-.02	.13	-.03	.23	.27
23	G	.06	-.22	.05	.19	-.01	-.11	.05	-.15	.01	.05	.12	.24
	B		.06	.11		-.02	.12		.04	-.02		.08	-.35
24	G		.15	.32		-.09	.55		-.13	.75		-.12	.15

Teacher	Sex	WK 1	WK 2	WK 3	WD 1	WD 2	WD 3	P 1	P 2	P 3	A 1	A 2	A 3
	B	.03	.07	-.02	-.28	.08	.11	-.02	.16	.16	-.02	-.05	-.49
25	G	-.02	-.12	-.06	.01	-.29	.19	-.06	.25	.28	-.40	-.15	-.20
	B	.12	.11	.16	-.11	-.13	-.03	.34	.12	-.01	.10	.38	.28
26	G	.06	-.11	.20	.11	-.16	-.07	.30	.12	-.09	.02	-.06	.07
	B		.05	.12		-.01	-.18		.34	.27		.08	.26
27	G	.28		-.21	.51		-.34	.51		-.44	.24		.10
	B	.48	.56	.03	.57	.09	-.20	.36	.34	-.19	.33	.25	-.44
28	G		.53			-.07			.55			.46	
	B	.30	.16	-.08	.23	-.10	-.07	.38	.28	-.24	.18	-.15	.29
29	G	-.05	.14	.08	.30	.26	.18	.17	.43	.21	.21	-.04	.34
	B	.45			.20			.58			-.13		
30	G	.16	.18	-.03	.13	.11	.00	-.11	.10	-.07	-.15	.09	.05
	B	.18	.21	.19	.19	.32	.46	.02	.31	.21	.20	.15	.38
31	G			-.18			-.06			-.19			.34
	B	.01		.01	.33		.21	.29		.22	.06		.10
32	G		.25	.42		.07	.73		-.04	.69		.13	.02
	B	-.06	-.20	-.07	.03	-.15	-.14	-.12	-.35	-.23	.16	.06	-.13
33	G		-.12	.04		.35	-.10		-.03	-.01		.14	.15
	B	-.17	-.22		-.19	-.24		-.24	-.08		-.01	-.22	
34	G	.10			-.01			.02			.11		

GRADE 2—NON-TITLE I

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B		.00			.63			.49			.46			.63	
1	G	.23	.40		.18	.42		.09	.36		.26	.41		.20	.66	
	B	-.25	-.51		-.10	-.27		-.07	-.48		-.21	.04		-.69	-.04	
2	G	.19		.07	-.01		-.03	.12		.10	-.06		-.16	-.29		-.03
	B	-.07		-.34	-.00		.32	-.01		.24	.17		.18	.23		.52
3	G	.31			-.26			.14			.11			.26		
	B	.16	-.24		-.12	-.24		.05	-.24		-.41	.11		-.17	.15	
4	G	.13	.04	-.13	-.17	-.03	.15	-.27	.12	-.13	-.49	-.34	-.16	-.54	-.05	-.20
	B	.24	.12	.01	-.30	.43	-.23	.15	-.20	-.39	-.08	.11	.19	-.06	.39	-.00
5	G	-.29	-.02	.23	-.34	-.26	.25	-.09	-.11	.41	-.20	-.21	.29	-.02	-.03	.01
	B	-.49	.19		-.01	.34		.13	.06		-.18	-.06		-.02	.10	
6	G	-.07	.09	.54	.47	.35	.43	-.11	.04	.04	-.37	-.19	.20	-.01	.15	.21
	B	.48	.27	.22	.38	.30	.66	.54	.05	.45	.22	-.22	-.18	.23	-.17	.00
7	G	.10	.66	-.26	.24	.38	-.42	.12	.33	-.40	-.24	-.37	-.35	-.15	-.15	-.30
	B	-.16	-.05	-.39	-.21	-.17	-.37	-.23	-.10	-.56	-.10	-.33	-.26	-.28	-.12	-.24
8	G	-.05	.03	-.45	-.07	-.23	-.04	.13	-.18	-.33	-.05	-.20	-.65	.00	-.17	-.55
	B	.25	.18	.35	.11	.36	-.02	.10	.13	.24	.41	.20	-.18	.39	.34	-.02
9	G	.35	-.21	.09	.01	-.16	.05	.11	-.24	-.21	.57	.18	.53	.41	.03	.39
	B	.52	.15	.25	.52	.39	-.06	.20	.51	.02	.12	.47	-.14	.46	.61	-.24
10	G	.03		.16	-.17		.10	-.27		.46	.17		.21	.18		.44
	B	-.21	-.08	-.50	-.38	.03	-.39	-.49	-.58	-.33	-.37	-.07	-.29	-.23	-.21	-.08
11	G	-.43	-.28		-.21	-.20		-.34	-.50		-.22	-.04		-.37	-.40	
	B	.26	.18	.37	-.03	-.17	.11	.11	.27	-.03	.26	.36	-.02	-.04	.27	-.33
12	G	-.01	.41	.51	-.16	-.03	.34	.24	.21	-.03	.39	.12	.17	.18	.31	.14

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.39	-.81	-.14	-.07	-.26	.00	-.22	-.36	-.53	-.16	-.05	.12	.04	.08	-.01
13	G	.31		-.66	.25		.36	.09		-.36	-.10		-.24	-.09		-.16
	B			.01			-.09			-.12			-.15			-.34
14	G			.34			.37			.27			-.07			-.15
	B	.02	.06	-.01	.27	.14	-.45	-.19	.05	-.02	-.10	-.02	-.16	.08	-.11	-.28
15	G	.13	-.08	.13	-.06	.37	-.31	.11	.05	-.47	.14	.26	.03	.04	.16	.35
	B	.38	-.06	-.20	.24	.02	-.01	.03	.10	-.18	.21	.01	.07	.15	.17	-.05
16	G	.04	.14	-.15	.15	-.02	-.06	.00	-.19	-.11	.11	-.10	.02	.19	-.28	.04
	B	-.36	-.14	.07	-.12	-.24	.17	-.06	.01	.75	-.02	-.16	.49	-.10	-.33	.37
17	G	-.45	-.10	-.01	.04	.04	-.12	.09	.10	.32	-.12	.06	.28	.16	.34	.04
	B	.38		.31	-.04		.59	.54		.35	.36		.31	.58		.34
18	G	.26	.09	.14	-.02	-.13	-.45	.14	-.25	.32	.25	.36	.28	.43	.17	.43
	B		-.24	-.45		-.14	.14		.25	-.01		.11	-.05		-.16	-.04
19	G	.12	.02		-.12	.20		.20	.09		.14	.22		-.0	-.07	
	B	-.60	.43	-.39	-.49	.08	-.34	-.48	.31	-.20	-.37	.10	-.01	-.35	.22	-.38
20	G	-.17	.09	-.31	.07	-.39	.14	-.43	.03	-.20	-.01	.11	-.11	-.16	-.04	-.16
	B	-.20	.73	.54	-.41	.36	.29	-.18	.26	.51	-.46	-.10	-.07	-.16	-.11	.21
21	G	.25	.25	-.18	.25	.07	-.09	.54	-.01	-.21	-.30	-.21	-.31	.20	-.30	-.14
	B	.05		.03	.06		.14	-.18		.38	.05		-.07	.15		-.19
22	G	.11	-.66		-.26	-.46		-.59	.01		-.21	-.19		-.11	.29	
	B	-.00	-.35	.16	-.12	-.20	.02	.04	.12	-.01	.21	-.48	.24	.44	-.03	.10
23	G		-.46	-.22		-.39	-.12		-.63	-.16		.04	-.17		.26	-.17
	B	.15	.23	-.03	.35	.39	-.00	.02	.52	-.13	-.23	-.20	.08	-.06	.31	.37
24	G	-.25	.26	.02	.33	.50	.14	-.27	.47	.25	-.00	.00	-.31	.16	.06	-.18

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.13	-.00	.13	.28	-.01	-.09	-.29	.16	.17	-.20	-.29	-.12	.04	-.44	-.19
25	G	-.03	-.26	.59	-.06	.34	.32	-.02	.35	.46	-.13	-.41	-.07	-.05	-.33	-.29
	B															
26	G	.17	.52	-.12	.19	.09	-.16	.21	-.00	.18	.05	-.13	.13	-.17	.12	-.01
	B	-.13	-.36	.38	-.03	-.30	.21	-.05	.12	.19	-.09	-.00	.11	.01	.01	.28
27	G	-.42	-.02	.62	.19	-.21	.36	-.05	.04	.29	-.09	.19	.39	-.04	-.02	.41
	B	-.51	-.34	-.76	-.21	-.32	-.58	-.60	-.39	-.19	-.01	-.08	-.40	.13	.08	-.09
28	G		-.47			-.53			-.28			.08			-.03	
	B	-.08			-.11			-.38			.06			-.14		
29	G	-.31			-.36			-.03			-.17			-.20		
	B	.38	.51	.58	.43	.29	.49	.28	.40	.09	.34	.23	.27	.12	.29	.14
30	G	.31	.22	.40	.71	.27	.63	.33	.08	.32	.28	.02	-.06	.31	.10	.12
	B	.13			-.17			-.27			-.00			-.30		
31	G	.31	.22	.40	.71	.27	.63	.33	.08	.32	.28	.02	-.06	.31	.10	.12
	B	.13			-.17			-.27			-.00			-.30		
32	G	-.12	-.53	-.26	-.04	-.08	-.38	.27	.03	.07	.03	.11	.11	.04	-.13	.24
	B															
33	G			-.65			-.42			-.48			.19			.49
	B	-.03	-.04	-.11	-.04	-.12	.30	.05	-.48	.16	-.42	.02	.43	-.33	-.10	.56
34	G	-.24	.19	-.14	.09	.09	.17	-.00	-.05	.24	.10	.01	.06	-.11	-.16	-.02
	B	.01	-.08		-.13	-.19		.04	-.11		.12	-.01		-.02	.09	
35	G	.16			.17			.37			.18			.18		
	B	.31	.43		.27	-.12		-.09	.05		.12	.00		.14	-.10	
36	G	-.06			-.10			-.28			.04			.11		

Teacher	Sex	WK 1	WK 2	WK 3	WD 1	WD 2	WD 3	R 1	R 2	R 3	AC 1	AC 2	AC 3	AR 1	AR 2	AR 3
	B	-.05	.42	.09	.02	-.04	-.01	.39	-.21	.04	- 18	-.35	.02	-.02	-.13	.02
37	G	-.03	-.01	.09	.14	-.18	-.18	.39	-.27	-.25	-.03	-.17	-.11	-.03	-.20	.28
	B															
38	G	.31	.56		-.23	.65		.06	.58		-.27	-.21		-.30	.02	
	B	.71	.55	.42	.46	.07	-.07	.92	.72	-.03	.10	.39	.25	.12	.52	.34
39	G	.44	.42		.40	.05		.51	.52		-.06	.66		.29	.43	-.05
	B			-.87			-.44			-.47			-.38			-.16
40	G			-.42			-.22			-.08			.12			-.21
	B	-.42	-.21	.18	-.19	-.07	.15	-.19	-.09	-.19	.27	-.09	-.23	.13	-.00	.15
41	G	-.08	-.48	-.14	.29	-.05	.03	-.04	-.48	-.19	.28	-.09	-.02	.15	-.12	.02
	B	-.12	-.62		-.12	-.11		-.10	-.35		-.05	.07		.05	-.33	
42	G	-.19		-.03	-.02		-.12	.04		-.05	.24		.19	-.07		.08
	B	.11	-.03	-.07	-.13	.13	-.49	-.29	-.25	-.50	.20	-.28	.13	.24	-.37	-.24
43	G	.42	-.44	-.04	.43	-.31	-.18	-.09	-.39	-.06	.17	-.15	-.32	.25	-.39	-.16
	B	-.46	-.36	.19	.44	-.38	-.44	-.23	-.44	-.22	.04	-.26	.08	-.11	-.27	-.04
44	G	.20	-.21	-.35	-.29	-.14	-.09	.03	-.03	-.66	.18	-.04	-.03	-.19	-.10	-.04
	B	.02	-.23	.45	-.21	-.18	-.49	.12	-.26	-.02	.18	.03	-.54	-.24	-.24	-.22
45	G	-.31	-.19	.08	-.28	-.14	-.31	.00	-.06	-.33	.15	-.01	-.14	-.19	.06	-.19
	B	.35	.57	.35	.58	.07	.23	.35	.35	-.20	.00	.31	.23	.30	-.00	.31
46	G	.11	.46	-.09	.13	.62	.15	.12	.56	.44	-.34	.17	.21	-.04	-.02	-.09
	B	.09	-.05	.07	.36	-.12	.15	.38	-.24	.18	.21	-.24	-.01	-.20	-.39	-.14
47	G	-.28	-.37	-.15	-.45	-.03	-.22	-.30	-.60	-.09	-.06	-.02	-.17	-.29	-.19	-.09
	B	-.28	.17	-.30	-.11	.15	-.14	-.11	-.18	-.46	.21	.17	-.18	-.01	-.02	-.17
48	G	-.44		-.19	-.15		-.27	-.03		-.08	.14		-.45	-.12		-.48

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	.22	-.06		.02	-.17		-.15	-.15		-.14	-.27		-.35	-.26	-.01
49	G	.32	.24		.13	.09		.12	-.05		-.22	.00		-.17	-.03	.33
	B	.04	.33	.70	.19	.18	-.07	.19	.18	-.34	.39	-.02	-.03	.48	.06	-.16
50	G	.25	.24	-.05	.13	.09	-.04	-.13	-.30	-.01	.10	.18	.18	.06	.23	.09
	B	-.26	-.32		-.15	-.46		-.54	-.20		-.01	-.10		-.20	-.22	
51	G	-.26	-.51	-.34	-.36	-.38	-.32	-.29	-.58	-.27	.08	-.27	-.16	-.17	-.30	-.21
	B	.31	-.18	.33	.11	-.07	.34	.50	.03	.75	-.66	-.00	-.00	-.67	-.13	.15
52	G	.05	.05	.16	.62	.21	.13	-.04	.23	.43	-.52	-.05	-.01	-.48	.05	-.11
	B			-.51			-.35			.06			-.01			-.15
53	G			-.09			-.22			.11			-.14			.09
	B	.54	.06	.35	.06	-.23	.46	.78	.32	.79	.02	.50	.15	.16	.14	.18
54	G	.73	.07	.46	-.10	.11	.31	.04	.37	.50	.26	.20	.14	.35	.13	.18

GRADE 3—TITLE I

Teacher	Sex	WK 1	WK 2	WK 3	WD 1	WD 2	WD 3	R 1	R 2	R 3	AC 1	AC 2	AC 3	AR 1	AR 2	AR 3
	B	-.13			-.14			-.32			.21			.14		
1	G	-.11	-.02	-.19	.10	-.21	-.10	-.16	-.24	-.19	.43	-.03	-.14	-.01	-.19	-.10
	B	.13	-.23	.01	.07	.03	-.17	.18	.01	-.39	.11	-.07	-.06	-.18	.02	-.07
2	G	-.42	-.13	-.03	.03	-.04	-.01	.07	.29	-.11	-.19	-.15	-.19	-.09	.03	-.22
	B	.04	-.27	.09	.03	-.32	-.03	.21	-.11	-.12	-.04	-.35	.43	-.04	-.15	.37
3	G	-.26	-.23	.04	-.18	-.22	.21	-.37	-.06	.04	-.19	.00	.33	-.08	-.00	.21
	B	-.56	-.10	-.03	-.51	-.18	.15	-.37	-.21	-.0	.21	.14	.14	-.27	-.15	.20
4	G	-.47	-.30	-.35	-.62	-.21	-.48	-.41	.00	-.19	.13	.01	.25	-.40	-.28	.12
	B		-.04	.11		-.19	-.10		-.04	.06		.20	-.13		.32	-.09
5	G	-.15	-.26	-.01	.26	-.00	-.12	-.05	-.05	-.11	.30	.13	.23	.16	.03	.13
	B	-.18		-.11	-.02		.21	-.00		-.27	-.41		-.35	.11		-.23
6	G	-.16	.01	.17	-.34	.10	.10	.11	.27	-.19	-.32	-.03	-.02	.39	-.06	-.08
	B	.03	-.11	.02	-.02	-.06	-.13	.21	-.01	.14	.38	-.24	-.02	.59	-.23	.06
7	G		.22	.26		.05	.05		-.09	-.25		-.05	.28		.04	.23
	B	-.57		-.90	-.24		-.45	-.37		-.60	-.31		-.53	-.05		-.53
8	G	.50	-.73		.25	.25		-.11	-.62		-.35	-.94		.13	-.59	
	B	.04	-.24	.12	-.10	-.09	.29	.12	-.28	-.04	.14	-.53	-.30	.02	-.34	.08
9	G	-.10	-.35	-.07	-.02	.05	.14	-.15	-.06	.02	-.15	-.40	.02	-.09	-.36	.01
	B	-.38		-.32	-.48		-.15	-.76		-.05	.48		-.49	-.43		-.31
10	G	-.42	-.28	-.05	-.28	-.04	-.01	-.64	-.17	.21	-.38	-.36	-.24	-.58	-.19	.06
	B	-.12	-.16	.12	-.06	-.31	.01	-.40	-.13	.04	-.06	.17	.11	-.24	.11	.21
11	G	-.53	-.21	-.08	-.41	-.09	-.09	-.35	-.13	-.03	-.23	.18	.13	-.13	.22	.31
	B	2.26	.93		1.06	.42		1.88	.16		-.41	-.42		.41	.07	
12	G	3.29	1.17	1.08	1.31	.55	.11	3.00	.49	.04	-.13	.28	-.14	.53	.59	-.12

Teacher	Sex	WK			WD			R			AC			AR		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.00	.20		.15	.23		-.04	-.23		.11	.02		.02	.17	
13	G	-.25	-.15		-.03	-.01		-.11	-.01		.16	-.15		-.03	-.03	
	B	.32	-.17	-.05	.21	-.08	-.26	-.05	.15	.11	-.01	-.11	-.09	.02	-.07	-.44
14	G		-.28	-.18		-.11	-.25		-.09	-.16		-.01	-.36		-.08	-.20
	B	-.06	-.10	.18	-.43	.01	-.01	-.34	.03	.26	.38	.12	.28	-.16	-.04	.27
15	G			-.08			-.04			-.08			.07			.18
	B	.43	.07	.13	.33	.02	.11	.23	.19	.12	.01	.14	.31	-.02	.21	.08
16	G	.26		-.19	.03		.21	-.05		.10	.01		.15	-.16		.01
	B	-1.01	.58		-.63	.80		-.55	.25		-.23	.76		-.21	.01	
17	G	-.81	1.21	.13	-.48	.70	.16	-.12	.81	.19	-.12	.96	.23	-.40	.47	.13
	B	-.44		-.52	-.27		-.21	-.30		.05	-.16		-.16	.17		.18
18	G	-.69	-.48	-.11	-.55	-.25	.11	-.34	-.16	-.11	-.15	.22	-.32	-.30	.35	-.12
	B	.01	.32	.31	-.06	-.26	-.01	.20	-.01	-.07	-.15	.09	-.29	-.08	.09	-.19
19	G	-.18	-.05	.38	-.06	.02	.37	-.18	.26	.37	-.15	.05	-.24	-.29	.00	-.01
	B		1.06	.04		.21	.20		.63	-.02		.10	.00		-.00	-.11
20	G	.81	1.86		.66	.01		.99	.59		.92	.39		1.23	.47	
	B	.18	-.24	.02	.31	-.04	-.03	-.23	-.27	.03	.40	.50	.15	.16	-.04	.05
21	G	.41		-.29	.21		-.15	-.05		.03	.02		.11	.11		-.08
	B	-.14		-.09	.18		.12	.02		-.06	.08		.23	-.19		.01
22	G	-.10	-.16	.18	.13	-.08	-.14	-.23	-.14	.27	.07	.12	.13	.26	-.01	-.07
	B	-.18	-.13	-.07	-.22	.00	.00	-.18	-.08	.32	-.66	-.63	-.29	-.14	-.01	-.07
23	G															
	B	-.00	-.35	.41	.13	-.26	.13	-.14	-.32	.10	-.03	-.33	-.02	-.02	-.48	-.06
24	G	-.14	-.22	-.07	-.06	-.31	-.06	.02	-.26	.13	-.19	-.07	.26	-.24	-.20	.15

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.24	.06		-.07	.18		-.09	.30		.08	-.01		.02	.27	
25	G	-.20			-.03			-.33			.06			.30		
	B	-.45	-.26	.21	-.16	.04	.25	-.03	-.02	.29	.29	.30	.21	-.03	.44	.10
26	G	-.37		-.03	-.01		.03	-.22		.39	.22		.43	-.18		.33

GRADE 3—NON-TITLE I

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	.63	.17	.28	-.13	.13	.49	.45	.68	.31	.39	.17	.09	.05	.52	.43
1	G		.16	.22		-.03	.04		.20	.16		.29	-.29		.37	-.03
	B	-.01	1.33	-.02	.10	.13	-.04	.34	.57	-.10	.08	.02	-.18	-.22	.51	-.13
2	G			.70			.16			.06			-.19			-.40
	B	-.37	.45	.11	-.12	.05	-.22	.09	.38	.16	-.08	.21	-.08	.14	.06	-.09
3	G	.15	.32	-.05	-.06	.26	-.09	.76	.50	.31	.14	.03	.06	.16	-.06	-.10
	B	.14	.09	-.20	-.10	.22	.20	-.15	.11	-.00	.25	.11	.21	.13	.16	.46
4	G	-.10		-.11	-.08		-.15	-.13		-.49	.45		.13	.18		.07
	B	.22	.09	-.04	.46	.02	-.06	-.23	.43	-.27	.11	.20	.31	.27	.45	.60
5	G	.05	.12	.35	.37	.32	.13	.26	.04	-.13	.01	.22	.37	.18	-.15	.38
	B	-.83	-.88	-.21	-.63	-.40	.01	-.27	-.58	.71	-.12	-.49	-.38	-.35	-.84	-.77
6	G	-.64	-.35	-.41	-.20	.21	-.12	-.05	-.53	.43	-.34	-.29	-.13	-.38	-.28	-.21
	B	-.33	-.03	-.36	-.11	.07	-.02	-.00	-.52	-.45	.01	-.32	-.19	-.31	-.15	-.11
7	G	-.03	.21	-.35	-.04	.18	-.28	.14	.45	-.43	-.05	-.20	-.30	-.31	.02	-.05
	B	.31	.54	.25	.57	.04	.39	-.01	-.07	.22	.01	-.36	.02	1.00	-.19	-.23
8	G	.28	.31	-.17	.20	.13	-.13	.31	-.20	-.87	.15	.45	.16	.62	-.27	.06
	B	-.33	.10	.11	.02	-.16	-.04	-.30	.35	-.23	.03	-.19	.07	.12	.09	.13
9	G															
	B	.36	.24	.09	-.06	.01	.05	-.02	.38	-.03	-.10	-.07	-.13	-.12	.19	.06
10	G	.02	.13	.19	.06	-.02	.02	-.58	.03	.21	-.07	-.20	-.02	.04	-.17	.37
	B	-.46	-.08	-.02	-.18	-.18	-.08	-.86	-.30	-.08	-.43	-.38	-.28	-.64	-.21	.10
11	G	-.47		-.45	-.41		-.08	-.41		-.29	-.67		-.42	-.15		-.36
	B	.39	.34	-.23	.06	.45	.06	.03	.16	-.18	.23	-.11	-.05	.24	-.11	-.38
12	G	.42	.44	.17	.32	.37	.31	-.18	-.08	-.02	.14	.12	.07	-.27	-.55	-.54

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	.28	-.55	-.15	.19	-.14	.15	.07	-.73	-.03	.11	-.07	.04	.17	.32	-.08
13	G	-.18	.15	-.23	-.08	-.02	-.07	.22	-.17	.35	.05	.05	.07	.23	.31	-.22
	B	.26	.25	.39	.29	.15	.33	-.27	-.02	.87	-.04	-.06	.02	-.35	.19	.16
14	G	.06	-.07	.39	-.05	.05	.02	-.07	.11	.39	.06	-.21	.06	.19	.06	.26
	B		-.42			-.13			-.07			-.01			.10	
15	G		-.18	.02		-.03	.08		.11	.34		-.12	.10		.01	-.05
	B	.15	-.15	.02	.19	-.11	.13	-.24	-.38	.18	-.09	.11	.12	.09	-.01	.35
16	G	.09	-.32	.01	.02	-.26	.15	.00	-.32	-.48	-.17	-.15	.26	-.32	-.27	.27
	B		-.04	.21		.20	.05		-.67	.20		-.15	.39		-.07	.40
17	G	.49		-.44	-.03		-.32	.07		-.20	-.02		.25	-.13		.07
	B	.40	-.20	-.07	.17	-.29	-.29	.04	.42	-.48	-.18	-.12	.04	.13	-.23	.09
18	G	-.12	.15	.09	.13	-.13	-.16	.07	.19	-.21	-.04	-.00	-.21	-.09	.14	-.28
	B	-.10	.37	.15	.33	.23	.06	.52	.48	-.01	.28	.22	.34	.51	.25	.60
19	G		-.03			.37			.19			.32			.38	
	B	.53	-.68	-.67	-.02	-.14	-.17	.02	-.13	-.80	.15	-.39	-.14	.15	-.53	-.35
20	G	.02	-.12	.13	-.05	.05	.03	.16	.32	.07	-.34	-.14	.11	.21	.11	-.22
	B	.17	.47		.05	.04		-.28	-.47		-.07	.05		-.12	.01	
21	G		.06	.06		.28	-.11		-.52	.56		-.04	.51		-.24	.15
	B	.24		-.46	-.08		-.37	-.31		-.36	-.33		-.41	-.24		-.58
22	G															
	B	-.52	-.73	-.13	-.20	-.12	-.04	-.08	.06	.07	-.27	-.24	.01	.12	-.39	.05
23	G	.10	-.36	-.07	-.01	-.36	-.01	-.35	.02	-.02	-.10	-.19	-.25	-.12	.04	.25
	B	-.30	-.41		.01	.28		-.10	-.07		.12	-.04		-.14	-.03	.02
24	G	-.09	-.19		.11	-.07		.05	.02		-.04	-.30		.01	-.39	-.16

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.15	-.02	-.04	-.21	-.04	-.38	-.28	.11	-.33	.34	-.07	-.21	-.16	-.04	-.23
25	G	.08	-.04	-.10	.02	-.08	-.17	-.48	-.23	-.44	.15	-.05	-.34	.24	-.06	-.22
	B	-.38	-.46	.04	.39	-.29	-.03	.39	-.88	.26	.25	.29	.09	.12	.07	.01
26	G	.07	-.14	.10	.27	-.34	-.28	.10	-.27	-.44	-.02	.14	-.04	-.12	.19	-.01
	B	-.22	-.53	-.22	-.23	-.22	.02	.12	-.47	-.00	.13	-.16	.10	.07	.09	.08
27	G	-.49	-.44	-.41	-.13	-.35	-.07	-.47	-.39	-.10	-.03	-.18	-.04	-.17	-.22	-.09
	B	-.17	.22	-.31	.05	-.09	.12	-.12	.12	.03	.07	.19	.07	.13	.16	-.31
28	G	.48			.19			.39			.45			.82		
	B	.42	-.08		.12	.09		.54	.23		-.02	.07		.15	.26	
29	G	.41		-.20	.32		.06	.46		-.12	.26		.32	.15		.42
	B	-.04	-.03		.08	.24		.09	.59		.02	-.04		-.33	.01	
30	G	-.06	-.33	.35	.21	.28	.01	-.20	.13	-.35	.06	.24	.20	.09	.16	.39
	B	.47	.30	.70	.05	.08	-.34	.90	.16	-.04	-.03	.24	-.25	.24	.86	-.16
31	G			-.17			-.20			-.29			-.23			.11
	B	-.14	.09	-.73	-.23	.05	-.44	-.38	-.18	-.15	-.15	.05	-.21	-.47	-.35	-.24
32	G	-.13	-.04	.28	.09	.19	.40	-.21	.13	.44	-.15	-.28	.13	.05	-.47	.08
	B	-.14	.09	.01	-.26	.05	-.25	-.54	.41	-.03	.01	-.10	-.08	-.09	-.06	-.24
33	G	-.39	-.21	-.24	.06	.14	-.28	.00	.01	.11	-.27	-.02	-.22	-.38	.09	.11
	B	.13		.28	.23		.07	.34		.72	.14		.03	.45		-.06
34	G	.18	-.23	.23	.04	-.20	.14	.10	-.30	-.03	.30	-.02	-.02	.30	.16	-.11
	B	.23		.31	-.01		.71	-.19		.77	.07		.78	.11		.23
35	G	.02	.06	-.30	.16	-.03	-.08	-.07	.42	-.12	.22	.12	-.03	-.25	.18	.15
	B	-.23	.10		-.22	-.23		-.08	-.37		-.23	.32		-.34	-.22	
36	G	.16	-.10		-.04	-.17		-.04	.18		.12	-.07		.06	-.20	

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	-.30	-.48		-.41	-.31		-.87	-.08		-.46	-.36		-.42	-.13	
37	G		-.40	-.26		-.33	-.03		-.44	.21		-.37	-.14		-.21	-.23
	B	-.18	.92	.46	.36	.26	.20	-.05	.58	.51	.09	.14	.18	.13	-.05	.41
38	G	.51	.40	.36	.11	-.07	.20	.73	-.16	.29	.57	.18	.46	.58	-.10	.65
	B	-.25	.28	.25	-.17	.22	-.01	.02	-.15	.33	-.32	.25	-.01	-.30	.51	.24
39	G	-.22	.33	-.08	.05	.15	-.14	-.43	-.06	.36	.38	.29	.34	-.01	.14	.63
	B	-.60	-.33	-.22	-.45	-.17	.08	-.80	-.29	-.25	-.28	-.29	-.21	-.76	-.22	-.27
40	G	-.88	.61	.15	-.31	.12	.11	-.41	-.47	-.09	-.24	-.23	-.33	-.65	.06	-.26
	B	.02	-.43	-.35	.18	-.19	-.51	.13	-.16	-.76	.15	-.10	.21	-.11	-.45	-.59
41	G	-.09	.04	-.37	-.13	.09	-.02	-.05	-.15	-.04	.27	-.06	-.35	.11	.01	-.90
	B	.08	.15	-.32	.14	-.15	-.07	.30	.15	-.37	.29	-.17	-.04	.40	.17	.10
42	G	.08	-.05		-.01	.11		-.01	.06		-.07	.14		.48	-.01	
	B			-.20			-.08			-.15			-.05			-.43
43	G	-.32		-.29	-.18		-.24	-.06		-.09	-.40		-.12	-.68		-.34
	B	-.21	-.28	.52	.10	.12	.12	-.06	.12	.31	-.27	-.01	-.31	-.67	-.05	-.33
44	G	-.04	-.40	-.15	-.06	-.38	-.11	.02	.13	-.17	-.25	-.38	-.29	-.47	-.43	-.33
	B	.41	.16		.05	-.10		.52	.44		.16	-.39		.51	.31	
45	G	.10	-.12		-.02	-.01		-.25	-.10		.13	.32		-.05	.22	
	B	.19	-.24	.07	-.16	-.12	-.09	.18	-.05	-.44	.14	.28	-.13	.08	-.13	-.01
46	G	.29	.57	-.19	.10	-.02	.15	-.15	.11	-.12	-.04	.06	-.14	.07	.28	-.36
	B	-.18	.09		-.15	.15		.32	-.13		-.16	.07		-.15	-.08	
47	G	.70	.46	.70	.04	.29	.26	.37	-.21	1.07	.05	.08	-.05	.24	.15	.04
	B	-.03	.04	.09	-.18	.05	-.01	.24	.01	.11	.08	.12	-.07	-.21	-.12	-.04
48	G	-.26	-.04	.30	-.29	-.13	-.17	-.33	.33	.62	-.38	-.11	.06	-.36	-.14	.13

		WK			WD			R			AC			AR		
Teacher	Sex	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
	B	.26	-.57		-.03	-.34		.47	-.20		.30	-.24		.42	-.24	
49	G	.35	-.47	-.10	.43	-.01	.25	.31	-.20	-.07	.18	-.14	.04	-.05	-.22	.26
	B	-.30	-.00	.12	-.01	-.02	.13	.17	-.10	-.17	.19	.06	.10	.53	.44	.07
50	G	.37	-.28	-.22	.07	.01	-.10	.70	.29	-.25	.24	.37	.30	.63	.41	-.06
	B	.03	.23	.81	.08	.15	.23	-.07	-.37	.01	-.38	.13	.11	-.23	-.18	.36
51	G	-.46	-.01	.41	-.38	-.32	.50	-.91	-.11	-.07	-.28	-.01	.19	-.26	.10	.15

APPENDIX B

MEANS AND STANDARD DEVIATIONS FOR ADJUSTED GAIN SCORES ON THE SUBTESTS OF THE METROPOLITAN ACHIEVEMENT TESTS FOR EACH CLASS ACROSS THREE YEARS

Means and standard deviations are shown only for those classes in which scores for 14 or more children were available; blank cells indicate that data were available on fewer than 14 children.

All scores derive from covariance analyses computed within Title 1 versus non-Title 1 schools, within boys versus girls, and within year one versus year two versus year three, for each subtest separately.

Adjusted gain scores have Mean = 0 and SD = 1, and reflect gain (in grade level equivalent scores) when the influence of entry level (preschool) is statistically controlled. Positive values reflect a higher mean gain than would be expected by chance and negative values a lower one.

Abbreviation Key

M - Mean, SD - Standard Deviation
B - Boys, G - Girls
WK - Word Knowledge (vocabulary)
WD - Word Discrimination
R - Reading
*A - Arithmetic Concepts and Skills
*AC - Arithmetic Computation
*AR - Arithmetic Concepts and Problem Solving (arithmetic reasoning)
— - Linear constancy across three years
/ - Linear improvement across three years
\ - Linear decline across three years
/\ - Non-linear trend across three years

*See text of paper regarding these three subtests.

S U M M A R Y

Shown below are the *percentages* of teachers in each of the four consistency categories broken down by subtest, grade, and Title 1 status (includes only those data sets where data were available for at least 14 students).

WORD KNOWLEDGE

	Grade 2		Grade 3	
	Title 1	Other	Title 1	Other
—	33	25	35	31
/	19	11	20	10
\	19	3	5	8
^	29	61	40	51

WORD DISCRIMINATION

	Grade 2		Grade 3	
	Title 1	Other	Title 1	Other
—	19	28	25	38
/	9	6	20	19
\	19	11	10	5
^	53	56	45	38

READING

	Grade 2		Grade 3	
	Title 1	Other	Title 1	Other
—	14	28	30	15
/	19	8	25	18
\	19	17	5	10
^	48	47	40	57

ARITHMETIC CONCEPTS AND SKILLS

Grade 2, Title 1

—	24
/	19
\	5
^	53

ARITHMETIC COMPUTATION

	Grade 2	Grade 3	
	Other	Title 1	Other
—	19	30	54
/	11	5	15
\	19	10	8
^	50	55	23

ARITHMETIC CONCEPTS AND PROBLEM SOLVING

	Grade 2	Grade 3	
	Other	Title 1	Other
—	22	25	26
/	8	10	15
\	11	10	19
^	58	55	41

GRADE 2—TITLE I

	WK	WD	R	A	AVG	N
1	-.40 -.24 .07 .41 .34 .34	-.17 .03 .04 .55 .54 .53	.57 -.17 .04 .38 .41 .44	.02 -.14 .05 .29 .31 .40	-.28 -.13 .03 .41 .40 .43	18 23 24
	/	^	/	—	/	
2	.04 -.10 -.02 .28 .15 .27	.09 -.10 .12 .60 .32 .61	.19 -.32 .09 .76 .41 .35	.08 -.25 .25 .37 .36 .45	.10 -.19 .11 .50 .29 .42	24 14 16
	—	—	^	^	^	
3	.16 .11 -.09 .50 .73 .28	.10 .22 -.15 .78 .53 .57	.24 -.01 -.27 .57 .46 .60	-.34 .00 .07 .55 .44 .42	.00 .08 -.11 .60 .54 .47	16 16 22
	\	^	\	^	—	
4	.50 .06 .24 .79 .49 .43	.26 -.09 .17 .48 .57 .50	.35 .18 -.24 .63 .57 .40	.30 -.15 -.13 .39 .50 .44	.35 .00 .01 .57 .53 .44	19 22 15
	^	^	\	^	—	
5	-.20 .18 .10 .42 .38 .39	.14 .17 .47 .62 .70 .66	.23 .24 .05 .52 .70 .60	-.05 .25 .01 .42 .40 .34	-.09 .21 .16 .49 .54 .50	24 19 23
	^	^	^	^	^	
6	.02 .38 -.16 .42 .42 .36	.12 .51 .16 .50 .75 .43	-.10 .60 .15 .53 .62 .30	.20 .24 .36 .45 .43 .28	.06 .43 -.21 .48 .55 .34	15 17 18
	^	^	^	^	^	
7	-.26 -.17 -.18 .44 .35 .38	-.18 .24 .30 .53 .47 .49	-.26 -.13 -.61 .56 .55 .43	-.21 -.03 -.44 .45 .37 .43	-.23 -.14 -.38 .50 .44 .44	27 22 24
	—	\	^	^	—	
8	-.03 .03 -.07 .55 .42 .45	.07 .02 .10 .64 .34 .55	-.20 .29 .12 .71 .40 .36	-.11 .07 .16 .41 .37 .48	-.07 .06 .03 .58 .38 .46	14 14 15
	—	—	—	/	—	
9	-.39 -.27 -.14 .37 .30 .41	-.52 -.23 -.13 .41 .41 .40	-.76 .23 .08 .29 .46 .64	-.11 -.20 -.13 .43 .34 .44	-.45 -.23 -.08 .38 .38 .47	14 22 17
	/	/	/	—	/	
10						11 13 4

#	WK	WD	R	A	AVG	N
11	-.06 .59 -.19 .25	.04 .61 -.28 .27	.09 .59 -.29 .39	-.07 .47 -.18 .44	.00 .57 -.23 .34	24 15 0
12	.95 .60 .06 .53 -.09 .31	.29 .66 .09 .47 -.11 .41	1.05 .69 -.04 .43 -.04 .44	.82 .54 .11 .40 -.17 .48	.78 .62 .05 .46 -.10 .41	17 15 17
13	-.01 .44 -.18 .65 -.39 .40	-.18 .58 -.41 .55 -.33 .59	-.16 .38 -.43 .52 -.16 .47	-.06 .41 -.23 .44 -.13 .44	-.10 .45 -.31 .54 -.25 .48	18 22 18
14	.05 .63 -.13 .51	-.12 .39 -.18 .67	-.05 .56 .05 .40	-.12 .46 -.36 .52	-.06 .51 -.15 .52	17 18 12
15	-.03 .78 -.02 .31	-.16 .58 -.15 .41	-.10 .60 -.05 .47	-.08 .37 -.04 .46	-.09 .58 -.06 .41	20 18 12
16	-.45 .46 -.35 .40 -.19 .28	-.17 .41 -.15 .61 -.05 .56	-.39 .40 .22 .42 -.09 .30	-.22 .33 .06 .60 -.07 .40	-.31 .40 -.17 .51 -.10 .34	16 24 24
17	-.23 .66 -.05 .33 .41 .58	.10 .72 .17 .48 .25 .56	-.48 .67 -.30 .55 .31 .48	-.18 .38 -.09 .54 .12 .33	-.20 .61 -.07 .48 .27 .49	23 22 21
18	-.38 .45 -.15 .34	-.40 .42 -.21 .46	-.50 .48 -.03 .52	-.26 .42 .07 .47	-.38 .44 -.08 .45	21 12 20
19	.03 .34 .06 .41	.16 .69 .18 .51	.26 .47 .33 .58	.08 .48 .30 .34	.13 .50 .22 .46	27 13 17
20	.03 .45 .11 .49	-.36 .64 .16 .64	-.09 .51 .25 .64	-.05 .23 -.05 .41	-.12 .45 .12 .54	24 19 8

#	WK	WD	R	A	AVG	N
21	-.40 .21 -.05 .41 .61 .34	-.28 .34 .08 .59 .50 .60	-.23 .03 .10 .61 .53 .58	-.04 .41 -.28 .45 .43 .45	-.24 .25 -.04 .51 .52 .49	18 22 16
22	.14 -.25 .05 .47 .32 .38	.01 -.18 -.23 .56 .38 .32	-.06 -.38 .05 .48 .29 .48	-.10 .02 .21 .45 .52 .49	.07 .20 .02 .49 .38 .42	24 17 17
23	.05 -.14 .02 .45 .37 .31	.20 .00 -.19 .66 .49 .47	.11 -.07 .07 .48 .46 .49	.02 .19 .26 .37 .47 .53	.10 .01 .04 .49 .45 .45	26 17 19
24	.10 .23 .49 .37	-.05 .35 .49 .65	-.04 .39 .52 .73	.01 -.08 .41 .48	.00 .22 .48 .56	0 20 15
25	.01 -.03 -.04 .50 .36 .32	-.14 -.12 .15 .53 .41 .52	-.04 .21 .22 .64 .33 .44	-.20 -.10 -.34 .46 .31 .47	.09 .01 -.00 .53 .35 .44	19 15 14
26	.09 -.01 .18 .52 .60 .65	.01 -.15 -.05 .50 .58 .41	.32 .12 -.05 .81 .47 .40	.06 .14 .18 .47 .49 .35	.12 .03 .07 .58 .54 .45	16 22 19
27	-.02 .43	-.25 .44	.05 .59	.19 .34	-.03 .45	12 13 16
28	.51 .55 .78 .68	.53 .02 .63 .67	.28 .43 .69 .64	.32 .34 .86 .83	.41 .33 .74 .70	15 22 11
29	.16 .15 .02 .67 .50 .41	.26 .08 .08 .75 .67 .57	.30 .35 .02 .81 .66 .52	.19 -.10 .32 .37 .31 .42	.23 .12 .11 .65 .54 .48	21 33 22
30	.32 .08 -.06 .48 .42 .42	.17 .04 .02 .83 .58 .65	.28 .07 .05 .52 .40 .38	.14 .04 .04 .34 .31 .44	.16 .06 .02 .54 .43 .47	16 16 16

	WK			WD			R			A			AVG			N		
31			.00 .40			.20 .56			.01 .52			.36 .49			.14 .49	13	12	16
32	-.04 .63		.20 .52	.03 .64		.46 .75	.24 1.11		.44 .63	.01 .43		.06 .31	.06 .70		.29 .55	14	13	21
33	-.08 .46	-.15 .37	-.01 .42	-.01 .50	.13 .49	-.12 .52	-.06 .33	-.17 .46	-.10 .63	.12 .38	.10 .34	.03 .46	-.01 .42	-.02 .42	.05 .51	17	18	19
34	-.03 .62			-.10 .43			-.10 .60			.05 .37			.04 .50			21	13	0

GRADE 2—NON-TITLE I

#	WK	WD	R	AC	AR	AVG	N
1	.25 .47 .55 .71	.21 .50 .66 .58	.12 .41 .61 1.01	.14 .43 .34 .45	.20 .65 .48 .52	.19 .49 .53 .66	16 27 12
2	-.07 -.48 -.01 .75 .54 .70	-.06 .17 .06 .62 .69 .49	.01 -.34 .12 .67 .50 .55	-.14 .11 -.13 .50 .50 .35	-.52 .09 .14 .47 .37 .52	-.16 -.19 -.02 .60 .52 .52	19 28 14
3	.06 .72	-.09 .74	.04 .76	.15 .37	.24 .54	.08 .62	21 10 13
4	.14 -.09 .48 .57	-.16 .12 .51 .54	-.16 -.04 .65 .66	.46 .14 .46 .54	.41 .04 .49 .48	-.21 -.07 .52 .56	20 25 11
5	.06 .06 .09 .92 .76 .75	-.32 .11 -.05 .70 .64 .72	.01 .16 .10 .87 .43 .69	-.15 .04 .23 .55 .37 .41	-.04 .20 .00 .45 .48 .49	.11 .04 .03 .70 .54 .61	21 22 22
6	.35 .14 .52 .70 .74 .62	.16 .34 .42 .61 .61 .68	.05 .05 .10 .75 .66 .56	-.25 -.12 .19 .47 .42 .44	-.01 .12 .21 .58 .56 .35	-.08 .11 .29 .62 .60 .53	20 23 18
7	.28 .48 .00 .74 .80 .72	.30 .34 .16 .73 .64 .96	.32 .20 .06 .81 .76 .98	-.02 -.30 .26 .43 .41 .47	.03 -.16 -.14 .59 .47 .55	.18 .11 .03 .66 .62 .74	25 26 26
8	-.10 -.01 -.41 .70 .59 .64	-.13 -.20 -.26 .63 .56 .57	.03 -.14 -.49 .73 1.02 .55	-.08 -.27 -.39 .52 .50 .51	.13 -.14 -.35 .48 .40 .52	-.09 -.15 -.38 .61 .61 .56	20 20 21
9	.30 .01 .24 .43 .80 .64	.06 .14 .01 .52 .67 .54	.11 -.03 .04 .74 .69 .74	.49 .19 .13 .31 .47 .53	.40 .21 .16 .36 .68 .56	.27 .10 .12 .47 .66 .60	23 28 18
10	.21 .21 .77 1.01	.09 .01 .67 .68	-.09 .22 .51 .79	.15 .02 .31 .54	.29 .07 .52 .75	.13 .11 .55 .75	19 12 20

#	WK	WD	R	AC	AR	AVG	N
11	-.34 -.19 .68 .72	-.28 -.10 .38 .58	-.41 -.53 .54 .38	-.29 -.05 .59 .50	-.33 -.31 .48 .41	-.33 -.24 .53 .52	21 18 12
12	.12 .28 .45 .54 .59 .87	-.10 -.11 .25 .51 .69 .66	.18 .24 -.03 .48 .95 .76	.33 .26 .09 .44 .34 .40	.08 .29 .06 .69 .66 .64	.12 .19 .14 .53 .65 .67	19 23 26
13	.00 -.83 -.37 .91 .62 .68	.11 -.37 -.16 .72 .44 .52	-.04 -.39 -.45 .84 .75 .41	-.12 -.04 -.04 .47 .54 .48	-.03 .04 -.08 .43 .54 .48	-.02 -.34 -.22 .67 .58 .51	16 16 20
14	.17 .76	.13 .53	.07 .61	-.11 .42	-.25 .60	.00 .58	0 0 25
15	.07 -.01 .06 .63 1.23 .69	.11 .25 -.38 .70 .76 .69	-.04 .05 -.24 .86 .90 .82	.02 .12 -.06 .38 .38 .57	.06 .02 .03 .56 .55 .72	.04 .09 -.12 .63 .76 .70	29 26 20
16	.22 .03 .18 .94 .80 .50	.20 .00 .03 .61 .70 .49	.02 -.03 .15 .64 .64 .49	.17 -.04 .05 .41 .46 .33	.17 .03 .01 .32 .70 .56	.16 -.01 -.06 .58 .66 .47	20 22 20
17	-.40 -.12 .02 .73 .69 .79	-.05 -.08 -.01 .40 .56 .77	.00 .07 .49 .63 .73 .80	-.07 -.03 .36 .37 .53 .39	.01 .07 .17 .60 .58 .55	-.10 -.02 .21 .54 .62 .66	22 20 18
18	.32 -.23 .23 .74 .72 .74	-.03 -.30 .10 .76 .56 .85	.34 -.50 .34 1.01 .59 .86	.30 .07 .30 .35 .58 .31	.50 .09 .38 .73 .50 .53	.29 -.21 .27 .72 .59 .66	22 14 21
19	-.19 -.11 -.18 .66 .99 .82	-.16 .04 .32 .52 .62 .65	.13 .16 .31 .56 .59 1.04	.10 .17 .05 .36 .24 .48	.09 .12 .02 .46 .41 .51	-.04 .03 .10 .51 .59 .70	16 17 15
20	-.42 .25 -.36 .68 .78 .55	-.26 -.17 -.13 .67 .43 .60	-.46 .16 -.20 .49 .47 .57	-.22 .10 .06 .54 .42 .40	.27 .08 -.28 .38 .46 .45	.33 .08 .20 .55 .51 .51	19 19 20

#	WA	WD	R	AC	AR	AVG	N
21	.05 .43 .17 .08 .76 .71	-.04 .17 .09 .79 .76 .77	.23 .09 .14 .94 .59 .87	-.37 -.17 .19 .41 .34 .35	.04 -.23 .03 .44 .42 .51	-.02 .06 .05 .73 .58 .64	25 19 17
22	-.04 .48 .80 .63	-.11 -.21 .72 .65	.40 .11 .65 .48	-.09 -.16 .47 .37	.01 .30 .52 .38	-.13 -.09 .63 .50	26 14 13
23	-.09 -.40 .00 .59 .86 .63	-.02 -.30 -.03 .53 .71 .55	.18 -.26 -.07 .52 1.13 .61	.07 -.22 .07 .59 .51 .37	.27 .11 -.01 .39 .34 .39	.03 -.21 -.01 .53 .71 .51	14 16 17
24	-.06 .25 -.01 .94 .76 .92	.34 .45 .05 .73 .68 .64	-.14 .49 .02 .75 1.22 1.35	.10 -.10 .07 .47 .47 .57	.06 .18 .16 .51 .53 .84	.02 .25 .03 .68 .73 .86	24 28 26
25	-.08 .17 .34 .64 .98 .86	.12 .21 .10 .64 1.01 .77	-.17 .28 .30 1.03 .99 .93	-.17 -.37 -.10 .44 .44 .33	-.00 .37 -.23 .44 .46 .64	-.06 -.08 .08 .64 .78 .71	24 19 24
26	.17 .71	-.09 .73	.01 .65	.05 .36	-.26 .54	-.03 .60	15 12 13
27	-.28 -.18 .53 .51 .75 .86	.09 -.25 .30 .57 .45 .68	-.05 .08 .25 .92 .61 .91	.09 .10 .28 .37 .48 .42	-.01 .00 .36 .44 .44 .56	-.07 -.05 .35 .56 .55 .69	19 28 19
28	-.47 -.42 .37 .57	-.40 -.45 .51 .71	-.57 -.32 .79 .48	-.01 .02 .54 .48	.17 .01 .62 .61	.26 -.23 .57 .57	15 21 11
29	.24 .71	-.28 .62	.14 .60	.09 .60	-.18 .59	-.19 .62	25 11 11
30	.35 .37 .48 .67 .63 .81	.57 .28 .57 .80 .53 .55	.30 .25 .22 .60 .73 .50	.31 .13 .09 .48 .52 .51	.22 .20 .13 .41 .52 .45	.35 .25 .30 .59 .59 .56	22 21 20

#	WK	WD	R	AC	AR	AVG	N
31	.13 .97	-.15 .81	-.01 .84	-.00 .66	.05 .85	.00 .83	20 0 0
32	-.19 -.36 -.15 .63 .66 .56	-.03 -.32 -.21 .54 .68 .76	.12 -.20 -.12 .82 .48 .45	-.00 .02 .10 .59 .36 .48	.03 -.19 .06 .58 .55 .77	-.02 -.21 -.06 .63 .55 .60	19 17 18
33	no data						10 11 12
34	-.14 .05 -.12 .67 .68 .79	.03 -.04 .25 .44 .74 .72	.02 -.31 .19 .52 .59 .85	-.13 .01 .28 .55 .37 .44	-.21 -.12 .33 .47 .35 .78	-.09 -.08 .19 .53 .55 .71	25 21 20
35	.06 .81	-.03 .80	.15 .97	.14 .40	.04 .44	.07 .68	24 11 5
36	.17 .74	.12 .66	-.17 .56	.09 .41	.13 .46	.07 .56	18 12 8
37	-.04 .20 .09 1.15 .93 .76	.08 -.11 -.10 .73 .70 .73	.39 -.24 -.12 .68 .57 .57	-.11 -.26 -.05 .52 .49 .47	-.02 -.17 .16 .31 .62 .57	.06 -.11 -.00 .68 .66 .62	20 14 20
38	.40 .72	.56 .90	.78 1.18	-.25 .51	-.04 .45	.29 .75	12 15 9
39	.57 .50 .50 .73 .70 1.03	.43 .07 .20 .65 .40 .78	.70 .64 .11 .84 1.15 .78	.01 .51 .18 .33 .45 .29	.21 .48 .21 .42 .60 .43	.38 .44 .24 .60 .66 .66	17 21 15
40	-.63 .61	-.33 .64	-.26 .52	-.11 .66	-.19 .45	-.30 .58	0 6 15

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#	WK	WD	R	AC	AR	AVG	N
41	-.27 -.35 .02 .83 .70 .77	.03 -.06 .09 .53 .64 .64	-.12 -.28 -.19 .54 .89 .82	.27 -.09 -.13 .40 .43 .44	.14 .06 .09 .64 .39 .44	.01 -.17 -.02 .59 .61 .62	20 24 21
42	-.15 -.43 -.25 .47 .97 .68	-.08 -.03 .25 .69 .80 .71	-.04 -.08 -.12 .65 .95 .64	.07 .06 .17 .53 .36 .43	.00 -.22 .10 .56 .66 .32	.04 -.14 -.07 .58 .75 .55	22 14 23
43	.26 -.25 -.06 .88 .64 .72	.15 -.11 -.36 .80 .55 .57	-.19 .33 -.31 .69 .38 .68	.18 -.21 -.07 .26 .59 .45	.24 -.38 .20 .51 .42 .50	.13 -.26 -.20 .63 .52 .59	24 24 16
44	-.20 -.28 -.08 .76 .65 .87	-.38 -.25 -.26 .59 .63 .75	.13 -.22 -.44 .58 .60 .76	.10 -.14 .02 .36 .38 .57	-.14 -.18 .04 .42 .48 .58	-.15 -.21 -.16 .54 .55 .70	18 24 24
45	-.16 -.20 .26 .62 .61 .74	-.25 -.15 -.39 .51 .52 .55	.06 .13 .18 .62 .68 .47	.16 .00 -.33 .57 .41 .53	-.21 -.04 .20 .36 .56 .41	-.08 .10 .17 .54 .56 .54	22 21 19
46	.21 .50 .19 .77 .91 .73	.32 .38 .20 .63 .72 .71	.22 .47 .02 .75 .85 .88	-.20 .23 .23 .54 .35 .32	.10 .01 .17 .78 .48 .86	.13 .32 .16 .69 .66 .70	22 21 20
47	-.15 -.18 -.04 .89 .65 .50	-.16 -.09 -.03 .83 .78 .62	-.06 .38 .04 .83 .37 .57	.04 -.15 -.09 .42 .44 .39	-.26 -.31 -.12 .43 .41 .49	-.12 -.22 -.05 .68 .53 .51	22 18 18
48	.37 .18 -.24 .76 .79 .47	.13 .07 -.22 .66 .81 .34	-.06 .24 .24 .54 .73 .43	.17 .09 -.34 .27 .30 .51	-.08 .05 -.35 .60 .47 .42	.10 .00 -.28 .57 .62 .44	22 18 17
49	.26 .07 .86 .73	.07 -.05 .61 .49	-.03 .11 1.20 .50	-.18 -.15 .41 .55	-.27 -.16 .40 .51	.03 -.08 .70 .56	20 27 8
50	.15 .28 .21 .80 .86 .86	.16 .13 -.05 .52 .72 .44	.02 .09 .13 .68 .83 .90	.24 .09 .10 .39 .35 .60	.26 .15 .00 .59 .37 .45	.17 .11 .03 .60 .63 .65	34 27 20

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#	WK	WD	R	AC	AR	AVG	N
51	-.26 -.41 -.37 .59 .61 .64	-.28 -.42 -.28 .76 .48 .40	-.39 -.39 -.29 .56 .72 .52	.05 -.19 -.18 .39 .47 .57	-.18 -.26 -.25 .41 .26 .31	-.21 -.33 -.28 .54 .51 .49	21 16 19
52	.18 -.07 .23 .93 .62 .80	.36 .06 .22 .76 .35 .59	.23 .12 .57 .82 .72 1.07	-.59 -.02 -.01 .68 .34 .48	-.57 -.05 -.00 .93 .70 .58	-.08 .01 .20 .82 .55 .70	22 20 21
53	-.31 .68	-.29 .62	.08 .61	-.07 .62	-.03 .39	-.12 .59	0 0 17
54	.65 .06 .41 .79 .79 .93	-.04 .06 .38 .67 .57 .82	.34 .34 .63 .89 .43 .99	.16 .35 .15 .47 .43 .40	.27 .14 .18 .44 .62 .61	.28 .17 .35 .65 .56 .75	22 24 26

GRADE 3—TITLE I

#	WK	WD	R	AC	AR	AVG	N
1	-.12 -.07 -.21 .64 .75 .49	-.01 -.13 -.12 .65 .61 .60	-.24 -.19 -.10 .44 .59 .44	.33 .07 -.04 .47 .38 .39	.06 -.01 -.08 .31 .56 .35	.00 -.07 -.11 .50 .58 .45	17 17 18
2	-.10 -.18 -.01 .70 .46 .47	.05 -.00 -.08 .57 .56 .45	.13 .14 -.23 .55 .77 .36	-.01 -.11 -.13 .47 .43 .48	-.15 .03 -.15 .33 .46 .36	-.01 -.02 -.12 .52 .54 .42	19 19 20
3	-.10 -.25 .06 .63 .52 .29	-.07 -.27 .09 .43 .36 .40	-.06 -.09 -.04 .50 .42 .46	-.11 -.17 .38 .54 .67 .34	-.06 -.08 .29 .46 .44 .57	-.08 -.17 .16 .51 .48 .41	24 22 18
4	-.53 -.19 -.15 .50 .45 .48	-.55 -.20 -.07 .55 .37 .52	-.39 -.11 -.09 .39 .33 .41	.18 .08 .18 .51 .44 .43	-.32 -.22 .17 .54 .42 .30	-.32 -.13 .01 .50 .40 .43	21 25 25
5	-.06 -.14 .05 .77 .42 .88	.27 -.10 -.11 .64 .55 .73	.03 -.05 -.03 .53 .47 .83	.22 .17 .06 .35 .35 .47	.08 .19 .02 .58 .52 .55	.10 .01 -.00 .57 .46 .69	15 15 21
6	-.17 .02 .54 .40	-.15 .16 .59 .47	.04 .23 .78 .36	-.38 -.21 .52 .60	.22 -.16 .80 .32	.09 -.08 .65 .43	18 12 18
7	-.05 .02 .10 .61 .59 .41	-.04 -.02 -.07 .57 .61 .55	.13 -.04 -.01 .84 .62 .48	.35 .16 .09 .38 .48 .44	.39 .12 .12 .97 .36 .26	.16 -.06 .05 .67 .53 .43	15 23 19
8	.03 -.74 -.93 .72 .75 .71	.01 .22 -.24 1.13 .66 .54	-.24 -.50 -.53 .54 .74 .41	-.33 -.80 -.42 .48 .73 .23	.04 -.51 -.41 .60 .55 .45	-.11 -.47 -.51 .69 .69 .47	16 17 15
9	-.03 -.30 .00 .59 .46 .49	-.07 -.01 .20 .54 .36 .48	-.01 -.16 -.01 .46 .26 .44	.01 .46 .11 .42 .46 .57	.03 -.35 .04 .48 .30 .80	-.02 -.26 .02 .50 .37 .56	22 19 20
10	-.40 -.40 -.22 .46 .48 .81	-.40 -.15 -.10 .38 .51 .73	-.71 -.21 .04 .33 .40 .77	-.44 -.37 -.40 .47 .55 .30	-.49 -.24 -.18 .37 .34 .49	-.49 -.27 -.17 .40 .46 .62	21 21 20

#	WK	WD	R	AC	AR	AVG	N
11	-.33 -.18 .03 .56 .46 .57	-.24 -.23 -.04 .51 .42 .46	-.37 -.13 .01 .67 .35 .44	-.14 .18 .12 .59 .53 .42	-.19 .15 .25 .47 .60 .67	-.25 -.04 .08 .56 .47 .51	26 21 21
12	2.69 1.07 1.07 1.32 .89 1.02	1.17 .49 .08 .84 .51 .63	2.35 .36 .07 .93 .55 .41	-.29 .00 -.07 .74 .56 .45	.46 .38 .08 .49 .49 .36	1.27 .46 .21 .87 .60 .58	24 20 20
13	-.17 .00 .61 .43	.03 .09 .71 .54	-.09 -.11 .62 .55	.14 -.07 .41 .58	-.01 .06 .40 .41	-.02 -.00 .55 .50	21 23 12
14	.32 -.22 -.12 .52 .46 .35	.25 -.09 -.26 .59 .49 .45	.09 .04 -.04 .48 .53 .40	.07 -.06 -.24 .42 .58 .51	.12 .07 .30 .71 .62 .51	.17 .08 -.19 .54 .54 .44	17 24 25
15	-.06 -.10 .05 .64 .52 .60	-.44 -.07 -.02 .66 .50 .70	-.32 .02 .10 .66 .43 .57	.41 .11 .18 .64 .45 .42	-.11 .06 .23 .54 .53 .60	-.10 -.02 .11 .63 .48 .58	14 19 23
16	.32 .06 .00 .79 .49 .51	.15 .12 .15 .69 .50 .54	.05 .20 .11 .64 .50 .45	.01 .10 .25 .41 .47 .31	-.11 .22 .05 .44 .66 .55	.09 .14 .11 .60 .53 .47	24 18 25
17	-.89 .85 .03 .49 1.05 .54	-.54 .76 .10 .58 .72 .45	-.29 .48 .06 .48 .98 .80	-.16 .84 .17 .41 .81 .40	-.32 .20 .08 .25 .85 .55	-.44 .63 .09 .44 .88 .55	20 24 14
18	-.54 -.45 -.34 .59 .25 .57	-.38 -.29 -.08 .62 .41 .54	-.32 -.34 -.02 .49 .42 .63	-.16 .24 .22 .49 .34 .50	-.02 .11 .05 .44 .52 .45	-.28 -.15 -.12 .53 .39 .54	22 14 21
19	-.08 .18 .35 .66 .60 .58	-.06 -.16 .21 .52 .31 .57	.01 .09 .18 .71 .51 .42	-.15 .08 -.26 .39 .28 .41	-.18 .06 -.09 .47 .43 .55	-.09 .05 .08 .55 .43 .50	31 21 21
20	.66 1.36 .55 1.31	.74 .13 .67 .49	1.01 .62 .43 .48	.86 .21 .43 .65	1.15 .18 .47 .81	.88 .50 .51 .75	15 21 12

#	WK	WD	R	AC	AR	AVG	N
21	.30 .92 · -.10 .64	.26 .71 · -.07 .50	-.13 .60 · .03 .53	.20 .62 · .14 .46	.14 .49 · .00 .45	.15 .67 · -.00 .52	29 13 24
22	-.12 .74 · -.00 .54 · .00 .68	.16 .59 · -.05 .53 · .03 .48	-.09 .45 · .03 .48 · .05 .47	.08 .51 · .22 .31 · .19 .32	.02 .66 · .03 .44 · -.02 .51	.01 .59 · .05 .46 · .05 .49	15 16 24
23	-.11 .52 · -.07 .58	-.22 .60 · -.05 .37	-.25 .46 · -.14 .43	-.61 .48 · -.52 .67	-.10 .28 · -.12 .72	-.26 .47 · -.18 .55	14 14 13
24	-.05 .61 · -.28 .48 · .14 .51	.06 .64 · -.29 .60 · .02 .61	-.08 .63 · -.28 .47 · .12 .47	-.09 .46 · -.17 .45 · .13 .42	-.11 .53 · -.32 .39 · .06 .46	-.06 .57 · -.27 .48 · .10 .49	23 22 18
25	-.22 .64 · .05 .57	-.05 .58 · .20 .59	-.22 .62 · .29 .89	.07 .53 · .04 .41	.17 .72 · .28 .55	-.05 .62 · .17 .60	20 14 7
26	-.42 .65 · -.20 .69 · .09 .53	-.09 .62 · .01 .59 · .14 .37	-.12 .57 · -.10 .55 · .33 .57	.25 .43 · .26 .20 · .32 .39	-.10 .54 · .32 .52 · .21 .51	.09 .56 · .06 .51 · .22 .47	27 15 23

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GRADE 3—NON-TITLE I

#	WK	WD	R	AC	AR	AVG	N
1	.31 .17 .25 .83 .75 .65	-.17 .04 .23 .77 .39 .63	.35 .40 .22 1.11 1.21 .97	.40 .24 -.13 .71 .41 .46	.05 .43 .16 .66 .71 .69	.19 .26 .14 .82 .70 .68	17 21 24
	—	/	—	\	^		
2	1.15 .30 1.39 .88	.17 .05 .76 .54	.21 -.03 1.13 .49	.07 -.19 .39 .60	.41 -.25 .57 .63	.40 -.02 .85 .63	12 17 20
3	-.07 .38 .02 .70 .76 .47	-.08 .15 -.15 .64 .56 .61	.47 .44 .25 1.14 1.00 .82	.04 .12 .00 .45 .53 .55	.15 .00 -.10 .55 .68 .56	.10 .22 .01 .70 .71 .60	21 25 24
	^	—	—	—	\		
4	.02 .19 -.15 .68 .85 .76	-.09 .28 .03 .62 .72 .81	-.14 -.06 -.25 1.03 .88 .67	.35 .19 .17 .35 .41 .52	.16 .25 .25 .65 .62 .84	.06 .17 .01 .66 .70 .72	20 19 18
	^	/	—	—	—		
5	.16 .10 .16 .69 .49 .80	.43 .18 .03 .61 .58 .56	-.05 .22 -.20 .89 1.11 .74	.07 .21 .34 .39 .47 .43	.24 .13 .49 .42 .78 .72	.17 .17 .16 .60 .69 .55	21 19 22
	—	\	^	/	^		
6	-.71 -.63 -.33 .51 .95 .63	-.35 -.11 -.07 .46 .72 .64	-.13 -.56 .54 .60 .80 1.22	-.26 -.39 -.23 .51 .37 .51	-.37 -.57 -.43 .80 .64 .79	-.36 -.45 -.10 .58 .70 .76	23 25 18
	/	/	^	—	—		
7	-.17 .09 -.36 1.21 .61 .79	-.07 .12 -.11 .72 .54 .41	.07 -.03 -.44 .86 .86 .78	-.02 -.26 -.23 .37 .51 .45	-.31 -.06 -.09 .53 .69 .68	-.10 -.03 -.25 .74 .64 .62	17 20 23
	^	—	^	^	^		
8	.30 .44 .04 .64 .72 .77	.38 .08 .13 .66 .64 .67	.16 -.12 -.33 .75 .69 1.07	.08 -.01 .09 .31 .76 .83	.80 -.22 -.09 .67 .71 .83	.34 .03 -.03 .61 .70 .84	23 21 22
	^	^	\	—	^		
9							16 18 19
	^	—	^	—	—	—	
10	.21 .18 .14 .84 .56 .78	.01 -.01 .03 .48 .49 .47	-.26 .20 .10 .92 1.36 .84	-.09 -.13 -.07 .46 .36 .37	-.05 .00 .22 .58 .59 .49	-.04 .05 .08 .66 .67 .59	26 23 25
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#	WK	WD	R	AC	AR	AVG	N
11	-.46 -.18 -.25 .42 1.19 .76	-.29 -.23 -.08 .59 .74 .78	.65 -.24 .19 .78 .93 .66	-.55 -.18 -.35 .37 .94 .49	-.41 -.41 -.14 .62 .59 .66	-.47 -.25 -.20 .56 .88 .67	17 18 21
12	.40 .39 -.01 .88 .83 .65	.18 .42 .20 .80 .64 .65	-.07 .05 -.09 .90 .86 .83	.19 -.00 .02 .44 .44 .36	-.00 -.31 -.47 .75 .70 .72	.14 .11 -.07 .75 .69 .64	21 24 22
13	.01 -.16 -.19 .79 .69 .62	.03 -.07 .04 .48 .59 .55	.15 -.42 .16 .96 .97 .95	.07 -.01 .05 .35 .23 .42	.20 .31 -.15 .45 .74 .57	.09 -.07 -.02 .61 .65 .62	24 20 24
14	.18 .09 .39 1.20 .55 .93	.15 .10 .15 .59 .62 .52	-.19 .04 .59 1.04 .80 1.19	.00 -.13 .04 .42 .34 .41	-.12 .13 .22 .60 .56 .71	.00 .05 .28 .77 .58 .75	19 23 21
15	-.28 -.09 .64 .62	-.07 -.01 .53 .50	.04 -.04 .76 1.16	-.08 .07 .45 .30	.04 .02 .44 .48	-.07 -.01 .56 .61	6 20 15
16	.12 -.22 .01 .71 .84 .68	.12 -.17 .14 .58 .65 .68	.14 -.36 -.15 .82 .72 .63	.12 .01 .19 .35 .51 .48	-.09 -.11 .31 .81 .87 .63	-.02 -.17 .10 .66 .72 .62	19 30 24
17	-.12 -.13 .70 .89	.10 -.14 .39 .42	-.29 -.01 .98 .96	.05 .31 .45 .33	.14 .23 .43 .77	-.02 .05 .59 .67	12 14 21
18	.12 -.02 -.00 .68 .71 .61	.15 -.21 -.23 .54 .62 .40	.06 .31 -.37 .69 .64 .94	.10 .06 .06 .42 .27 .43	.01 -.05 -.06 .46 .58 .49	.05 -.01 -.15 .56 .56 .58	28 22 19
19	.05 .10 .06 .66 .86 .52	.23 .33 .05 .50 .68 .54	.53 .29 -.15 1.23 .88 .76	.27 .29 .36 .53 .41 .38	.18 .34 .49 .85 .63 .70	.25 .27 .16 .75 .69 .58	17 22 17
20	.24 -.40 -.23 .88 .66 .90	-.04 -.04 -.06 .62 .55 .58	.10 .10 -.32 .90 .72 .89	-.13 -.27 -.00 .62 .36 .40	.18 .21 -.28 .38 .72 .55	.07 -.16 -.18 .68 .60 .66	21 14 18

#	WK	WD	R	AC	AR	AVG	N
21	.27 .72	.16 .62	.50 .68	.00 .40	-.11 .72	-.03 .63	13 14 12
22	-.31 .56	-.18 .60	-.32 .58	-.31 .52	-.46 .97	-.32 .65	12 8 17
23	-.18 -.52 -.10 .77 .63 .69	-.10 -.25 -.03 .50 .43 .82	-.23 .04 .03 .93 1.14 .75	-.18 .21 -.10 .35 .28 .49	-.01 .15 .13 .61 .59 .71	-.14 -.22 -.02 .63 .61 .69	24 18 23
24	-.18 -.28 .60 .43	.07 .07 .70 .61	-.01 -.02 .81 .62	.03 -.20 .47 .58	-.06 -.24 .51 .59	-.03 -.13 .62 .57	16 20 12
25	-.02 -.03 -.07 .68 .52 .75	-.07 -.06 .27 .54 .49 .54	-.40 -.09 -.38 1.07 .90 .68	.23 -.06 -.27 .62 .38 .42	.07 .05 -.22 .72 .36 .51	-.04 -.06 -.24 .73 .53 .58	24 24 22
26	-.11 -.34 .06 .57 .80 .94	.32 -.31 -.12 .57 .63 .64	.22 -.65 .01 .56 .68 1.12	.09 .23 .04 .41 .45 .67	-.02 .12 .00 .78 .74 .72	.10 -.19 .00 .58 .66 .82	22 24 20
27	-.38 -.48 -.31 .68 .52 .51	-.17 -.29 -.02 .52 .51 .61	-.23 -.42 -.05 .73 .67 .65	.04 -.17 .03 .36 .35 .33	-.07 -.08 .00 .62 .59 .66	-.16 -.29 -.07 .58 .53 .53	22 22 19
28	.19 .34 .93 .81	.13 .03 .61 .63	.16 .20 .89 1.27	.28 .23 .63 .45	.51 .25 .78 .64	.25 .21 .77 .76	20 17 13
29	.42 .12 .65 .91	.19 .05 .62 .53	.51 .20 1.02 .90	.08 .05 .37 .45	.15 .33 .43 .78	.27 .15 .62 .71	22 18 13
30	-.05 -.18 .30 .69 .70 .81	.15 .26 .07 .43 .52 .63	-.07 .36 -.15 .77 1.07 1.01	.04 .10 .12 .54 .45 .44	-.10 .08 .41 .48 .59 .59	-.01 .12 .15 .58 .67 .70	18 22 19

#	WK	WD	R	AC	AR	AVG	N
31	.43 .65 .15 1.03	-.04 .36 -.00 .67	.80 1.15 .20 1.03	.01 .46 -.24 .44	.25 .74 .01 .72	.29 .67 -.06 .78	16 13 19
32	-.14 .89 .05 1.07 -.27 1.17	-.05 .68 .09 .81 .06 1.10	-.29 .86 -.08 1.35 .12 1.15	-.15 .44 -.05 .51 -.06 .64	.19 .61 .38 .70 -.10 .89	-.16 .69 -.08 .89 -.07 .99	22 26 22
33	-.29 .54 -.03 .79 -.07 .76	-.08 .47 .09 .50 -.26 .43	.22 .73 .25 .85 .01 .93	-.15 .48 -.06 .38 -.12 .18	-.26 .55 .00 .47 -.13 .61	-.20 .55 .05 .60 -.11 .58	19 25 22
34	.15 .45 -.23 .52 .26 .78	.15 .58 -.23 .52 .10 .48	.24 .84 -.10 1.22 .36 1.12	.20 .46 .08 .32 .00 .44	.39 .55 .16 .49 -.08 .59	.23 .58 -.06 .61 .23 .68	22 16 23
35	.15 .58 .16 .60 .00 .78	.05 .46 .11 .69 .31 .58	-.15 .81 .40 1.14 .32 .78	.12 .73 .32 .49 .38 .61	.01 .59 .27 .53 .19 .68	.03 .64 .25 .69 .24 .69	26 15 16
36	.00 .75 -.01 .76	-.11 .44 .02 1.02	-.06 .81 -.08 1.07	-.02 .55 .11 .73	-.10 .66 -.21 .72	-.06 .64 -.03 .86	25 19 9
37	-.47 .98 -.44 .66 -.21 .84	-.49 .61 -.32 .52 -.16 .56	-.79 1.04 -.27 .79 .13 1.11	-.47 .43 -.37 .38 -.12 .45	-.42 .16 -.17 .54 -.34 .49	-.53 .70 -.31 .58 -.14 .69	21 19 15
38	.20 1.02 .65 .98 .41 .69	.23 .79 .09 .49 .20 .52	.37 1.34 .19 1.13 .39 .85	.35 .45 .16 .49 .34 .63	.37 .70 -.07 .39 .54 .56	.30 .86 .20 .70 .37 .65	22 21 18
39	.24 .82 .31 .63 .08 .68	.08 .46 .18 .64 -.08 .61	-.16 .65 -.10 1.40 .34 1.14	-.03 .65 .27 .49 .16 .51	.18 .65 .31 .82 .43 .51	-.14 .64 .19 .80 .19 .69	17 22 18
40	-.70 .57 .11 .95 -.01 .65	-.40 .55 -.03 .68 .10 .63	-.65 .50 .07 .97 -.16 .79	-.26 .33 -.26 .40 -.28 .38	-.72 .50 .09 .59 -.27 .57	-.55 .49 -.04 .72 -.12 .60	19 19 18

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#	WK	WD	R	AC	AR	AVG	N
41	-.03 -.14 -.36 .54 .71 .46	.04 -.02 -.27 .64 .40 .59	.05 -.16 -.39 .82 .82 .79	.21 -.07 -.07 .43 .33 .47	-.01 -.17 -.74 .76 .65 .68	.05 -.11 -.37 .64 .58 .60	24 18 16
42	.08 .04 -.13 .76 .69 .81	.05 -.01 -.04 .63 .57 .44	.11 .10 -.23 .75 .81 .94	.07 -.01 -.06 .65 .59 .29	.45 .07 .23 .63 .64 .94	.15 .04 -.05 .68 .66 .68	28 15 20
43	-.54 -.24 .76 .75	-.37 -.16 .83 .58	-.16 -.12 .93 .79	-.32 -.08 .39 .40	-.62 -.39 .30 .42	-.40 -.20 .64 .59	16 0 18
44	-.11 -.35 .13 .77 1.18 .78	.00 -.15 -.01 .56 .71 .53	-.01 .12 .03 .96 1.12 1.01	-.26 -.21 -.30 .50 .58 .26	-.55 -.25 -.33 .55 .88 .43	-.19 -.17 -.10 .67 .89 .60	30 24 33
45	.27 .05 .69 .80	.02 -.07 .63 .54	.17 .23 .92 1.02	.15 .36 .43 .37	.26 .28 .86 .63	.17 .17 .71 .67	20 18 12
46	.24 .10 .08 .70 1.11 .77	-.02 -.08 .05 .65 .62 .61	.00 .01 -.25 .90 1.30 .69	.04 .18 -.14 .50 .50 .44	.08 .05 -.21 .64 .79 .48	.07 .05 -.13 .68 .86 .60	26 21 17
47	.16 .21 .39 1.00 .70 .97	-.08 .20 .19 .65 .61 .42	.34 -.15 1.06 1.19 .90 1.09	-.08 .07 .23 .46 .27 .71	-.00 .01 .29 .57 .75 .64	.07 .07 .43 .78 .65 .77	18 24 15
48	-.16 -.01 .19 .64 .71 .78	-.24 -.06 -.08 .45 .52 .89	-.07 .21 .34 .79 1.23 .95	-.16 -.02 -.01 .49 .58 .44	-.29 .04 .04 .53 .73 .52	-.18 .03 .09 .58 .75 .72	26 29 23
49	.31 -.52 .07 .74 .64 .61	.19 -.16 .17 .57 .60 .44	.39 -.20 .15 1.45 .91 .80	.24 -.19 -.01 .57 .43 .35	.19 -.23 .04 .81 .50 .70	.26 -.26 .08 .83 .62 .58	23 26 16
50	.03 -.13 -.03 .82 .71 .82	.03 -.01 -.03 .42 .26 .80	.44 .08 -.20 .91 .95 .94	.22 .20 .19 .48 .39 .46	.58 .43 .01 .44 .83 .98	.26 .11 .00 .62 .67 .80	16 22 21
51	-.22 .13 .58 .77 .70 .83	-.16 -.04 .38 .63 .63 .55	-.51 -.27 -.04 .86 .81 .81	-.33 .07 .16 .37 .41 .54	-.24 -.07 .24 .70 .44 .47	-.29 -.03 .27 .67 .60 .64	23 22 16